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Abstracts of Conference Proceedings – Prize Category Papers

Category – Cleft and Craniofacial Anomalies

Abstract No: 0264

Retrospective analysis of preoperative secondary nasopalatoalveolar cleft using 3D CT scan

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Abstract Background

When a cleft alveolus is noticed and repaired, the repair also involves the nasal base and palate. Three-dimensional Computed Tomography scan is the most advanced method available to evaluate any anatomical structure in all dimensions of space. For patients with clefts, pre-operative 3D CT Scan is advised to evaluate the cleft in nasal, alveolar and palatal areas which need reconstruction. It is also a useful tool for diagnosis and treatment planning for future distraction and orthognathic surgeries.

Methods

3D CT Scan of 102 patients, taken from January 2016 to March 2018 in JMMCH&RI, Thrissur, for repair of cleft alveolus were evaluated in this study. Linear measurements were done to measure the cleft alveolus in superoinferior and mediolateral dimension, the cleft palate in anteroposterior and mediolateral dimension, and nasal cleft in anteroposterior and mediolateral dimension. Data were tabulated and descriptive statistical analysis was done using SPSS ver.21.

Results

The nasal cleft area showed a mean of 6.41 mm cleft in anteroposterior dimension, and 3.53 mm in mediolateral dimension. The alveolar cleft area showed a mean of 11.28 mm in superoinferior dimension and 8.49 mm in mediolateral dimension, and the palatal cleft showed a mean of 6.86 mm in the anteroposterior dimension and 2.54 mm in the mediolateral dimension.

Conclusion

Previous literature gives a data analysis of cleft alveolus only, as it is a major area of repair, and nasal and palatal areas are not usually considered. Even though nasal and palatal regions are minor areas, its repair carries a huge impact on function, stability and esthetics which will increase the quality of life of patient. The authors suggest changing the terminology of secondary alveolar bone grafting (SABG) to secondary naso-palato-alveolar bone grafting. (SNPABG).

Abstract No: 0328

Alternate treatment modalities in cleft maxillary hypoplasia - a preliminary study

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Abstract Background

Cleft palate, once operated will produce maxillary hypoplasia as the patient reaches adolescence. The extent of maxillary hypoplasia will depend on the type of cleft, nature of surgery performed, and the number of interventions in the perioral/palatal region. Though interceptive orthodontics can improve the growth of maxilla in the adolescent, the optimal management of maxillary hypoplasia is still not clearly defined. The purpose of this study was to undertake different surgical combinations to produce optimal hard tissue as well as soft tissue envelope.

Aims and Objectives

To assess and compare the esthetic outcomes of patients with alternate treatment modalities, apart from Le fort I and BSSO, in patient having cleft maxillary hypoplasia, relative mandibular prognathism associated with retrognathic chin and everted lowerlip.

Methods

15 patients with maxillary hypoplasia were selected and divided into three groups as per the following chart. Group I: Those needing a Le fort I advancement with lower sub apical osteotomy; Group II: Patients needing segmental maxillary distraction osteogenesis with

lower sub apical osteotomy; Group III: Patients treated with isolated maxillary advancement by anterior maxillary distraction (AMD).

Results

Though all the three groups had optimal outcomes, Group II patients had the best outcome in terms of maxillary fullness, correction of lower lip eversion, and post surgical orthodontic finishing.

Conclusion

All the three groups in our study showed good results, but the simpler and more cost effective method (Group II) proved to be an equally competent technique, producing balanced and beautiful dental rehabilitation.

Abstract No: 0383

Role of hamulotomy on hearing ability of non syndromic cleft palate patients: a prospective single blind comparative study

Dr. Anuj Jain

All India Institute of Medical Sciences

Abstract

Background

The primary goal of palatoplasty is to achieve a tension free palatal closure, ensuring no post-operative complications. Many surgeons fracture the pterygoid hamulus to minimize tension during palatoplasty. However, this maneuver has gained criticism by some authors on the grounds that it may lead to eustachian tube dysfunction. Our study intended to figure out the relationship of hamulus fracture with the postoperative state of middle ear in cleft palate children.

Methods

Fifty consecutive cleft palate patients, with an age range of 10 months to 5 years were recruited. All the patients were assigned to either hamulotomy or nonhamulotomy group preoperatively. All the patients were subjected to otoscopic examination and auditory function evaluation by brainstem evoked response audiometry (BERA) preoperatively and 1 month and 6 months postoperatively.

Results

Otосcopy revealed that the difference in the improvement of middle ear status in both the groups was statistically insignificant. Moreover, there was no significant difference in the BERA outcomes of the fracture and non fracture populations. Complication rates in both the groups was also not statistically significant.

Conclusion

It can be concluded that hamulotomy does not have any effect on the hearing ability in cleft palate population. Therefore, hamulotomy can be performed for tension free closure during palatoplasty.

Abstract No: 0519

Primary Rhinoplasty: Beneficial or Not?

Dr. Aditi Garg

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Abstract

Background

Primary nasal repair in cleft lip and cleft palate (CLCP) patients has been a topic of controversy. Initially, primary nasal repair was left for

preschool age, citing reasons of growth retardation. Since Salyer,¹ and McComb,² reported excellent improvements in nasal appearance after longitudinal studies of primary rhinoplasty without affecting the midfacial growth, primary rhinoplasty has been accepted as the treatment plan. Despite this, primary rhinoplasty has not become a norm at many centres. We wanted to authenticate that primary rhinoplasty improves the nasal symmetry in CLCP patients.

Aims and objectives

To compare nasal symmetry in CLCP patients undergoing only primary cheiloplasty, with those undergoing primary cheiloplasty with primary rhinoplasty.

Methods

This was a prospective randomised control study with 70 patients. The patients were randomly divided into: Group A, which underwent only primary cheiloplasty, and Group B, which underwent primary rhinoplasty with cheiloplasty. Basal photographs were taken preoperatively and 6–12 months postoperatively to compare nasal symmetry using 4 linear and 3 angular parameters. ImageJ software was used for the calculations. Paired t test and independent sample test were used for the statistics.

Results

Statistical analysis showed that nasal symmetry was better in patients in group B than in group A. Improvement was seen in 3 out of 7 parameters. There was no difference in relation to the other 4 parameters.

Conclusion

This study showed that doing primary rhinoplasty improves nasal symmetry compared to cases where primary rhinoplasty was not done.

References

1. McComb H (1985) Primary correction of unilateral cleft lip nasal deformity: a 10- year review. *Plast Reconstr Surg* 75(6):791–9.
2. Salyer KE (1986) Primary correction of the unilateral cleft lip nose: a 15 year experience. *Plast Reconstr Surg* 77(4):558–68.

Abstract No: 0531

Vector guided anterior maxillary distraction for midface hypoplasia in cleft patients

Dr. Ankur Thakral

Army Dental Corps

Abstract

Background

Early surgical corrections for cleft lip and palate tend to result in a poor skeletal and dental growth in the transverse and anteroposterior planes. Anterior maxillary distraction (AMD), an alternative to Lefort I distraction, is a technique of advancing the anterior part of the maxilla. However, the precision of distraction orientation is vital for final skeletal and occlusal results. The aim of this study was to evaluate the results of vector guided anterior maxillary distraction for correction of midface hypoplasia in cleft patients.

Methods

110 patients were included in the study for whom clinical, intraoral and cephalometric examination were carried out. Maxillomandibular relationship was transferred using facebow and semi-adjustable arcon type articulator was used for model surgery and fabrication of the distractor. After anterior maxillary osteotomy, distraction was carried out from the fourth day by customised vector guided intraoral

distractor at a rate of 1 mm per day, and continued according to individual requirements. An independent investigator analyzed cephalometric radiographs.

Results

Cephalometric radiographs taken before treatment and after consolidation revealed that the amount of distraction was highly significant. Statistically significant increases were found in SNA, ANB, ANS-PNS, and NV-A. Mean SNA changed from $75.11^\circ \pm 4.15^\circ$ to $80.13^\circ \pm 3.57^\circ$ and palatal length showed a highly significant improvement of $5.60 \text{ mm} \pm 2.22 \text{ mm}$. Accordingly, overjet showed a significant improvement of $6.25 \text{ mm} \pm 2.52 \text{ mm}$. However, no significant changes were noted in palatal planes and upper incisor angulations. There was also improvement in facial profile and upper lip protrusion.

Conclusion

The precision of AMD was improved by the use of vector guided tooth-borne palatal distractor, as it advanced the anterior maxillary segment, reduced negative overjet and created an adequate space in the arch without resulting in open bite and tipping of maxillary incisors.

Abstract No: 0639

Achieving nasal symmetry in unilateral cleft lip - an objective evaluation

Dr. Rahul Ahuja

Army Dental Corps

Abstract

Background

Outcome of primary cheiloplasty is dictated by lip symmetry and nasal symmetry. Achieving nasal symmetry is a goal for every cleft surgeon. Cleft nasal deformity is a distinct pathophysiological entity, due to the displacement of lower lateral cartilage, abnormal positioning of the columella, nasal septum and the skeletal pattern of the lesser segment. NAM is an important adjunct in achieving nasal symmetry. However, open tip rhinoplasty provides the avenue to physically reposition the displaced lower lateral cartilage in an optimal position.

Aim

To assess the efficacy of modalities, employed to establish nasal symmetry in unilateral cleft lip

Methods

60 patients with complete unilateral cleft lip/palate were operated for primary cheiloplasty with Modified Millard's rotation advancement technique. Subjects were divided into 3 groups of 20 each. Group 1 subjects operated employing Modified Millard's technique alone. In Group 2, subjects underwent NAM therapy followed by the same lip repair. Group 3 underwent Modified Millard's lip repair with open tip rhinoplasty. All patients were evaluated after minimum period of 12 months post operatively, parameters include alar inclination angle, nostril apex overhang, nostril height and diameter, columellar length and deviation angle were evaluated on the standard basilar and frontal view photographs taken in 1:1 ratio with the constant lens setting. The standardization of the photographs were obtained using photo-shop CS3 extended version 10.0.1

Results

All the parameters in Group 2 did show a statistical significance in comparison to Group 1. Group 3 showed a statistical significant result when compared to Group 1 and 2.

Conclusion

NAM has a significant influence in establishing nasal symmetry. However, open tip rhinoplasty establishes better nasal symmetry.

Reference

Thomas C. Open tip rhinoplasty with the repair of cleft lip. *BrJ Plast Surg* 2000, 53.

Abstract No: 0642

Role of Abbe flap in bilateral cleft lip deformity

Dr. Shreyas Sorake, Dr. Mustafa Khader

A J Institute of Dental Sciences

Abstract

Background

Patients with bilateral cleft deformities exhibit a negative profile even after corrective skeletal procedures, attributed to the volume deficit of the prolabium, which is devoid of muscle. Reconstruction is done by mobilizing the muscle from the two lateral segments. This increases the lip length at the expense of the width making the lip tight and retrusive, creating a negative profile. In such a scenario, Abbe flap could restore the volume of the central segment, improving lip/nose aesthetics and facial profile.

Aim

To objectively evaluate the profile changes that occur post Abbe flap transfer.

Methods

A total of 26 patients, age 15–21 years with negative soft tissue profile, 21 of whom had undergone prior skeletal correction and 4 patients with a normal maxilla were included in the study. Pre and 1 year post operative cephalograms were superimposed to evaluate the soft tissue point A and B(upper lip), and C(lower lip). In addition alpha (facial) angle and nasolabial angle were assessed.

Results

In our series, the soft tissue point A and point B was advanced restoring the volume of the prolabium providing the required projection. In addition, U/L lip proportion is balanced, inferring a tremendous improvement in terms of profile. The alpha angle became more acute, increasing the facial convexity, and the nasolabial angle was reduced, enhancing the lip/nose aesthetics.

Conclusion

Abbe flap has a significant role in improving the profile and lip nose aesthetics in bilateral cleft lip deformity.

Reference

1. Kumar KM, Murthy J, Narayan N (2015) Retrospective subjective evaluation of aesthetic outcome in secondary cleft lip deformities operated with Abbe's flap. *Int J Res Med Sci* 3:83–94.

Abstract No: 0697**Outcome assessment in bclp with the anatomic based subunit scale**

Dr. Tulasi Nayak, Dr. Krishnamurthy Bonathaya, Dr. Srikanth Bitra, Dr. Pritham N. Shetty

A J Institute of Dental Sciences

Abstract**Background**

Nasoalveolar molding is a presurgical orthopedic technique, used to improve the outcomes of bilateral clefts. However, the lack of a validated scale tailored toward bilateral clefts makes it difficult to quantify the merit of nasoalveolar molding and compare it to other techniques.

Aims

To evaluate and compare the early effect of nasoalveolar molding on two sets of similarly treated bilateral cleft patients; one who had, and one who had not received presurgical nasoalveolar molding using the recently published anatomic subunit scale 1.

Methods

The nasolabial esthetics of two sets of bilateral cleft lip and palate patients were evaluated on 2D photographs 6 months post cheiloplasty. The two groups were treated similarly except for the inclusion of nasoalveolar molding in one set.

Results

In this study the cupid's bow, vermilion symmetry, vermilion notching, premaxillary show at rest, scar esthetics, columella height, nostril symmetry and nasal tip definition were all statistically better in the Nasoalveolar molding group.

Conclusion

Using the new scale, we have found that at 6 months post cheiloplasty, the nasolabial esthetics are significantly better in patients who had received nasoalveolar molding in infancy.

Reference

1. Bonanathaya K, Shetty PN, Fudalej PS, Rao DD, Bitra S, Pabari M, Rachwalski M (2017) An anatomical subunit-based outcome assessment scale for bilateral cleft lip and palate. *Int J Oral Maxillofac Surg* 46:988–992. <https://doi.org/10.1016/j.ijom.2017.03.021>.

Abstract No: 0968**Presurgical simulation on facial change in cleft lip repair using homologous modelling**

Dr. Tomohiro Yamada

Kyushu University

Abstract

Surgical simulation is the most important preoperative preparation to increase the accuracy of surgery. In the surgical simulation, we focused on optimization of surgical approaches that take into consideration important tissues such as nerves and blood vessels during

procedures like implant implantation, deep buried teeth, tumor extraction, etc., and surgical simulation such as jaw deformity and cleft lip cleft surgery in which postoperative facial features are predicted and the organization of movement is examined. Regarding hard tissues, it is now possible to study bone fragment interference by commercially available software such as Simplant[®], but at present it is not yet satisfactory to predict facial features of soft tissues. Although it is possible to predict facial appearance with two-dimensional mandibular deformity with commercially available software such as Winceph[®], it is difficult to predict in three dimensions, and it has been put to practical use in surgical operations with only soft tissues such as cleft lip. In recent years, a method of homologizing the surface shape of a living organism has been developed and it has been made possible to convert it to a small number of parameters (principal component vectors), reflecting an anatomical feature consisting of enormous point clouds. Statistical analysis of three dimensional shape has become possible. We made it possible to quantify the bone morphology, including the curvature by homologizing the mandible. In this report, we applied this to the face shape and reported on posture analysis of individual face and posterior cleft palpation based on analysis of the results of surgical data accumulated.

Abstract No: 0266**Short term outcome of septoplasty in primary lip repair**

Dr. Tadashi Yamanishi, Juntaro Nishio, Koichi Otsuki, Takahide Kondo, Shouta Yakushiji, Setsuko Uematsu, Naoko Inoue

Department of Oral and Maxillofacial Surgery, Osaka Women's and Children's Hospital

Abstract

Primary septoplasty is a procedure that detaches the nasal septal cartilage from the surrounding tissue to straighten the nasal columella at the timing of the primary lip plasty. This technique has succeeded by number of clinicians, but only few reports have been published concerning outcomes of the technique. We have started to apply primary septoplasty for patients with unilateral cleft lip since May 2014. Here, we report short term outcomes of this technique. Eighty-three subjects with cleft lip who received primary lip plasty at our department between May 2013 and August 2015 were enrolled in the present study. Subjects were divided into two groups depending on whether primary septoplasty was conducted (ps group: n = 53) or not (non-ps group: n = 30). The procedure of primary lip plasty was identical (a small triangle technique) other than septoplasty between the two groups. The columellar angle and the n-sn-pg angle were measured with facial photographs taken before and after lip plasty, then results were compared between the two groups. The columellar angle in the ps group and in the non-ps group were $7.8 \pm 5.1^\circ$, and $12.5 \pm 6.6^\circ$, respectively. The n-sn-pg angle in the ps group and in the non-ps group were $176.8 \pm 3.2^\circ$, and $172.6 \pm 3.8^\circ$, respectively. Both measurements showed better improvements in deviation of the nasal columella in the ps group with statistically significant differences. There was no such a symptom of the saddle nose in the ps group. The present results suggested that primary septoplasty enhanced straightening of the nasal columella at primary lip plasty. A potential problem in the maxillary growth following this technique needs to be addressed hereafter.

Abstract No: 0313**Paediatric distraction osteogenesis: Armed forces perspective***Dr. Roy Indranil Deb**Army Dental Centre (Research & Referral)***Abstract****Background**

Correction of developmental and acquired craniofacial anomalies in children has been revolutionised with the advent of distraction osteogenesis application of distraction osteogenesis in the craniofacial skeleton has provided a viable alternative.

Aims/Objective

To discuss the various conditions where distraction osteogenesis is being used with successful results.

Methods

A variety of conditions ranging from cleft lip and palate to craniosynostosis, Treacher Collins syndrome, hemifacial microsomia, temporomandibular joint ankylosis is being treated using distraction osteogenesis.

Findings/results

Application of the principle of distraction osteogenesis to the craniofacial skeleton in children has resulted in satisfactory results compared to conventional surgery with less morbidity. The increasing recognition of upper airway obstruction in craniofacial syndromes has also focused attention on the potential for early correction using distraction techniques, particularly in the mid-face for the syndromic craniosynostoses and in patients with micrognathia, such as Pierre Robin sequence and related conditions.

Conclusion

Skeletal discrepancies associated with various craniofacial anomalies result in serious functional deficits and aesthetic compromise. To produce stable and aesthetic results, distraction in combination with traditional orthognathic surgery, remains the best approach in skeletal correction to achieve a functional occlusion and good facial balance.

Abstract No: 0804**Objectification of fronto-orbital bandeau in cranial vault remodeling surgeries***Dr. N. Praveen Ghanesh, Prof Paul C. Salins, Dr Samarth Shetty**Saveetha Medical College & Hospital***Abstract****Background**

Cranio-orbital reshaping for anterior cranial-vault deformities associated with craniosynostosis traditionally relies on the surgeon's subjective estimate of what is normal in terms of shape and appearance of a normal forehead. Computer-aided virtual surgery bandeau & normative age based templates to guide reconstruction were introduced in our centre to reduce subjectivity and to effect more reproducible surgical results.

Objectives

We developed a comprehensive protocol for management of craniosynostosis based on morphometric principles our protocol follows a

simple step-ladder pattern in a sequential manner the ultimate goal of this protocol is to provide a cost effective, reliable objective treatment strategy which compliments the surgeons subjective vision.

Methods

We have generated and documented age matched database of average fronto orbital contour using landmarks on the CT and normal cranium using a special scale on pediatric patients who come to our hospital. Now we extrapolate the data onto a graph sheet which shows the discrepancy and also the required contour change. A virtual planning is done and a template is generated which is used intraoperatively.

Results

We have operated 8 patients so far with the objective protocol and have noticed a 30% reduction in operative time and accuracy.

Conclusion

The protocol presented provides an excellent preoperative objective data that can be effectively used in planning and execution of this complex surgery. Our technique allows reproducible results that improve outcomes regardless of the expertise of the surgeon.

Reference

1. Khechoyan DY et al Surgical outcomes in craniosynostosis reconstruction: the use of prefabricated templates in cranial vault remodelling. *J Plastic Reconstr Aesthet Surg* 67(1):9–16.

Abstract No: 0968**Presurgical simulation on facial change in cleft lip repair using homologous modelling***Dr. Tomohiro Yamada, Kousuke Yasuda, Safieh Al Bougha, Hiroyuki Nakano, Goro Sugiyama, Shiho Tajiri, Azusa Nakashima, Yoshihide Mori**Kyushu University***Abstract**

Surgical simulation is the most important preoperative preparation to increase the accuracy of surgery. In the surgical simulation, we focused on optimization of surgical approaches that take into consideration important tissues such as nerves and blood vessels when implant implantation, deep buried teeth, tumor extraction, etc., and surgical simulation such as jaw deformity and cleft lip surgery in which postoperative facial features are predicted and the organization of movement is examined. Regarding hard tissues, it is now possible to study bone fragment interference by commercially available software such as Simplant[®], but at present it is not yet satisfactory to predict facial features of soft tissues. Although it is possible to predict facial appearance with two-dimensional mandibular deformity with commercially available software such as Winceph[®], it is difficult to predict three dimensions, and it has been put to practical use in surgical operations with only soft tissue such as cleft lip there is nothing. In recent years, a method of homologizing the surface shape of a living organism has been developed and it has been impossible to convert it to a small number of parameters (principal component vectors) reflecting an anatomical feature consisting of enormous point clouds statistical analysis of three dimensional shape has become possible. We made it possible to quantify the bone morphology including the curvature by homologizing the mandible. In this report, we applied this to the face shape and reported on posture analysis of individual face and posterior cleft palpation based on analysis result of surgical data accumulated.

Category – Craniomaxillofacial Trauma

Abstract No: 0122

Management of gun shot wounds – a clinical experience in ci ops

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Indian Army

Abstract

Gunshot wounds (GSW) are more prevalent in North-Eastern parts of India and in J & K. Maxillofacial surgeons play an important role in the treatment of patients after terrorist attacks, because many wounded persons suffer from injuries to the facial area. Maxillofacial surgeons are part of the trauma team. The extensive damage of the tissues of face and oro-facial region possesses great challenge for the treating dental surgeon to rehabilitate towards near perfect condition physiologically, functionally and esthetically. The basic aim is to restore the patient to form and function at an early stage, as he can return to his routine duties at the earliest. GSW are different from RTA, interpersonal violence or industrial accidents. It is very important to understand the nature of explosion and the effects of blast injuries to treat these types of patients. The initial analysis towards the extent of damage is difficult to assess, and later due to increase in chances of infection, ischemia and necrosis there are reduced chances towards faster healing, which complicates the reconstruction and rehabilitation. The rehabilitation of the defects usually involves initial stabilization, definitive reconstruction and later secondary reconstruction by surgical techniques of restoring the lost tissues and defects. The latest surgical protocol implies the immediate surgical reconstruction as a method of choice. Here, there are three cases of gunshot wounds managed successfully through the principles of surgery with gratifying results.

Keywords Gunshot wound, reconstruction, multidisciplinary approach, rehabilitation.

Abstract No: 0145

Comparison of two approaches for ORIF of subcondylar fractures

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Pushpagiri College of Dental Sciences

Abstract

Mandibular condylar fractures are quite common. There are numerous studies which evaluate the merits and demerits of open and closed reduction of condylar fractures, with majority of authors favoring open reduction. Approaches to subcondylar fractures are often a matter of personal choice, and very few studies are available comparing the efficacy of various approaches. The experience and skill

levels of the operator might also play a major role during the procedure. Increased operating time, difficult access and facial nerve damage are frequently deterring factors for beginners to perform open reduction of condylar fractures. In this presentation, the authors share their experience of more than one hundred subcondylar fractures done over a period of 4 years.

Abstract No: 0163

Combat related blast & ballistic craniomaxillofacial injuries - protocols in management

Dr. Priya Jeyaraj

Indian Armed Forces

Abstract

Background

The older, three-phased approach in management of ballistic injuries consists of initial debridement and suturing, followed by closed reduction of fractures using intermaxillary fixation or external pin fixation, without adequate exposure of bony fragments, followed by late reconstruction of residual bone defects after soft tissue healing is complete. The newer trend involves immediate debridement, precise anatomic reduction and fixation, and early definitive management of lost tissues by means of reconstruction using bone grafts and soft tissue flaps.

Aim

To compare efficacy of two management protocols- early aggressive comprehensive surgical intervention versus conservative approach as the definitive treatment modality of ballistic injuries.

Methods

This retrospective analytical study included 40 patients with maxillofacial injuries sustained in combat. They were divided into two groups; the first group included those who had undergone an early, aggressive, surgical intervention, and the second group, who had undergone conservative, closed reduction techniques, followed by delayed repair and late reconstruction of bone defects. Both groups were evaluated for post-operative recovery, early and late complications, and esthetic results and functional rehabilitation.

Results

The early, aggressive maxillofacial surgical protocol proved superior to the conservative approach, bringing about primary bone healing, quicker post-operative recovery, fewer complications such as wound site infection, delayed healing, non/mal-union, residual deformities, scar contractures, persisting functional debility like impaired masticatory efficiency/speech/deglutition etc., thus yielding improved functional as well as superior esthetic outcomes.

Conclusion

In today's low intensity conflict scenario, definitive management of victims should focus on early surgical repair and reconstruction, thus restoring quality of life to these soldiers, sparing them life-long indignity due to severe facial disfigurement and functional debility. A useful algorithm to approach and effectively deal with ballistic injuries has been proposed by the author.

Abstract No: 0172**Fixation of condylar fractures - a long story short***Dr. Cynthia Scott**SRM Kattankulathur Dental College and Hospital***Abstract****Background**

Trauma is one of the leading causes for significant rate of mortality and morbidity. The incidence of condylar fractures in our geographical region is reported to be about 19 to 22% of all mandibular fractures. The management of condylar fractures continue to be a perennial controversy. Both open reduction and closed reduction have their own proponents and opponents.

Objectives

To assess and analyse the current techniques, as well as the challenges of open reduction and internal fixation of condylar fractures.

Methods

The study conducted at our centre was prospective, over a period of 2 years. 48 patients reported with condylar fractures, of which 21 underwent surgical intervention. Fracture sites were surgically approached via submandibular, retromandibular and transmassetric anteroparotid approaches according to the level of fracture. Fixation was done with both miniplates and 3D plates. Post-operative data were evaluated at immediate postop, 1 month, 3 months and 6 months duration and the data was statistically analyzed.

Results

A total of 22 sites were surgically managed. From a surgeon's perspective, the challenges were faced in choosing an approach, avoiding facial nerve injury, fixation device and achieving absolute anatomical reduction.

Conclusion

Though surgical management provides better results, the difficulties in and around it makes it less favourable. To excel in surgical management and to provide near best treatment for our patients, we need newer perspectives and future research. With those in play, in future surgical management will provide best outcome with least complications.

References

1. Al Moraissi EE (2015) Surgical management of condylar fractures—a systemic review and meta-analysis. *J Oral Maxillofac Surg* 73(3):482–93.
2. Weiss Sawhney (2016) Update on mandibular condylar fractures. *Curr Opin Otolaryngol Head Surg*
3. Chrcanovic Surgical versus non-surgical treatment of condylar fractures: a meta-analysis. *Int J Oral Maxillofac Surg* 44(2):158.

Abstract No: 0192**A new 3D strut plating in management of subcondylar fractures***Dr. Bharathi K**Tagore Dental College and Hospital***Abstract**

Fractures of the mandibular condyle account for 9 to 45% of all mandibular fractures. Many surgeons seem to favour closed treatment with maxillomandibular fixation (MMF), but in recent years, open

treatment of condylar fractures with rigid internal fixation (RIF) has become more common. Although single miniplates can be adequate if the fragments are aligned properly, functional forces actually exceed the rigidity of one miniplate, and therefore the use of two has been proposed. However, in the condylar neck, the amount of bone is not always adequate to permit placement of 2–3 screws per fragment. Instead of two plates, a strut-shaped plate can be used. A three dimensional strut osteosynthesis plate was designed for stabilization of subcondylar and condylar neck fractures. This plate is based on the principles of functionally stable osteosynthesis. This paper discusses the clinical outcomes of condylar fracture osteosynthesis using this strut condylar plate.

Abstract No: 0262**Feasibility of an U-HA/PLLA composite sheet for navigation-assisted orbital trauma reconstruction***Dr. Takahiro Kanno**Department of Oral and Maxillofacial Surgery & Maxillofacial Trauma Center, Shimane University Faculty of Medicine***Abstract**

Orbital fractures with orbital defects are the common facial fractures encountered by Oral-Maxillofacial surgeons because of the exposed position and thin bony walls of the midface. The primary goal is to restore the pre-injury anatomy and volume of hard tissue, and to free incarcerated or prolapsed orbital tissue from the fracture, by spanning the bony defects with reconstructive implant material, and restoring the maxillofacial-orbital skeleton with open reduction and internal fixation of fractures. Numerous studies have reported orbital fracture repair with a wide variety of implant materials that offer various advantages and disadvantages. However, in defining the ideal characteristics of an orbital implant, surgeons prefer materials that: 1) allow conformation to anatomical shape, 2) are radiopaque, and 3) remain stable over time, especially for the reconstruction of relatively large bony walls. I would like to share with you the feasibility of newly developed uncalcined and unsintered hydroxyapatite (U-HA) particles and Poly-L-Lactide (PLLA; U-HA/PLLA) composite sheets with tack fixation for intraoperative navigation-assisted and computer-assisted orbital fracture reconstruction suffering from relatively large orbital wall defects, with ophthalmological malfunction and deformities. We have applied this feasible U-HA/PLLA composite sheet meeting all the demands above for nearly 100 orbital trauma reconstruction cases since 2014. Osteosynthetic bone fixation and reconstruction systems made from U-HA/PLLA composites have also recently drawn attention for effective application in maxillofacial surgery because of their bioactive, osteoconductive and bioresorbable properties. Furthermore, the up-to-date trends of computer-assisted and surgical navigation-assisted orbital trauma surgery will be discussed.

Abstract No: 0294
Transconjunctival Approach for Orbital & Zygomatic Complex Fracture: Our Experiences

Dr. Ravi Bagaria, Dr. Siddhartha Chakraborty

Private Practitioner

Abstract

The past few decades have seen the upsurge in road traffic and motor vehicle accidents, where trauma to the face is a common consequence. This has raised the mark for the surgeons to address traumatic injuries as aesthetically as possible. Among the various surgical approaches used to treat orbital and ZMC fractures, (subciliary, subtarsal, infraorbital, transconjunctival), the transconjunctival approach is one of the most aesthetic approaches. In this paper I would like to discuss the transconjunctival procedure, its advantage over other approaches, and complications encountered. Few clinical cases with pre-operative, intra-operative and post-operative images are presented. A follow-up of over 100 cases treated with transconjunctival approach is used to conclude the presentation.

Abstract No: 0357
Retrosseptal transconjunctival approaches for management of zygomaticomaxillary complex fractures

Dr. Lt. Col. Rohit Sharma, Dr. Shailey Singh, Dr. Seema Patrikar

Indian Armed Forces

Abstract

Background

A myriad of surgical approaches are available in existing literature for the management of fracture zygomaticomaxillary complex (ZMC).

Aims and objectives

The aim of this study was to evaluate the efficacy of retrosseptal transconjunctival approaches in the management of fracture of the ZMC.

Methods

A retrospective study was designed involving a population of patients from a single institution, who underwent 3-point fixation of ZMC fractures from 2008 to 2016. 77 cases (56 males, 21 females with average age of 28 years) were divided into two groups. Group-I (n = 51) had undergone reduction and fixation of the infraorbital (IO) rim using retrosseptal transconjunctival approach. In Group-II, (n = 26) the same approach with lateral canthotomy and inferior cantholysis was used for both IO rim and zygomaticofrontal (ZF) region. Association of both approaches with the outcome of fracture ZMC reduction and fixation were analyzed.

Results

Suboptimal results were found in 13 cases (25.5%) in Group-I and in one case (7.6%) in Group-II. The incidence of suboptimal results was high and statistically significant ($p = 0.017$) in Group I as compared to Group-II. 3 cases of trichiasis and 2 cases of entropion were found in Group-I and one case each of both was found in Group-II. Only one case of malposed lateral canthus was found in Group-II. All 26 cases in Group II had imperceptible scar along the extended incision. The

risk of suboptimal outcome is reduced by 20% (RR = 0.8) by the approach used in Group-II.

Conclusion

The retrosseptal transconjunctival approach with lateral canthotomy and inferior cantholysis is safe, esthetic and effective in the management of ZMC fractures.

Abstract No: 0582
AOMSI cranio-maxillofacial trauma fellowship - a superspeciality training program

Dr. Yash Chaddha

Elite Mission Hospital, Thrissur, Kerala

Abstract

Post MDS training is a necessity for the young generation of Maxillofacial Surgeons of India, as the MDS course in itself is not sufficient to make one master of the art. Although the MDS maxillofacial surgery guidelines described by the DCI does accommodate the majority of the maxillofacial work, the young surgeon has not accomplished much of it. The pass out MDS is unaware of what to pursue and how to do it, and ultimately ends up performing minor oral surgeries in a dental setup. This is where the AOMSI stepped in for the betterment of the next generation of the maxillofacial-surgeons by providing them a platform to launch themselves, and the program created is no less than a superspeciality training course which other medical specialities have. I am humbled to present the work that I have done in the past 1 year as a fellow in Cranio-maxillofacial trauma at Elite Mission Hospital, Thrissur, and give my review on the same.

Abstract No: 0647
Bite force as a parameter for comparison between 3-dimensional, locking and standard titanium miniplates for the management of anterior mandibular fractures: a prospective randomized double blinded clinical trial

Dr. Manoj Kumar

AECS Maaruti College of Dental Sciences & Research Center

Abstract

Objectives

To compare the efficacy of 3 dimensional & locking miniplates with standard titanium miniplates in the osteosynthesis of anterior mandibular fractures on the basis of bite force recordings and other clinical parameters.

Methods

A prospective randomized clinical trial was carried out for the treatment of anterior mandibular fractures. The patients were randomly divided into 3 groups of 2-mm 3 dimensional, locking and standard titanium miniplates. The assessment of patients was done at weekly intervals for 6 weeks using bite force recordings and other clinical parameters like duration of the surgery, occlusal

discrepancies, infection at the fracture site, paresthesia, plate removal. Appropriate statistical analysis was done.

Abstract No: 0831

History meets contemporary treatment

Dr. Chandrashekar Chattopadhyay

Dr. SN Medical College Jodhpur Rajasthan

Abstract

Trauma management in general and maxillofacial trauma management has evolved significantly in the past few decades, thereby reducing mortality and morbidity. However, challenges remain, and one such area is maxillofacial injuries in a patient, where in the nature of injuries are such that it requires definitive treatment in the ER set up itself along with lack of resources to the surgeon, particularly in a government setup. These cases include bilateral fracture of mandible when patient is unconscious and intubation has to be attempted, complex midfacial injuries involving loss of soft tissue envelop, or injuries associated with sharp weapons. In an era of sophisticated anesthesia, implant systems, modular OT and evidence based research, lessons learnt from past and the techniques (wires, local anesthesia, direct wiring etc.) used in that era still holds good. It cannot be overemphasized that use of simple armamentarium to the best must be taught to modern surgeons. Presented here are a few cases which have been treated with minimal morbidity in such setup. These severe injuries to the maxillofacial region can complicate the early management of a trauma patient owing to the proximity to the brain, cervical spine, and airway, if delayed or awaited for secondary management. Such procedures have their own challenges and pitfalls in an already difficult situation.

Keywords Definitive treatment, complex trauma, past armamentarium.

Abstract No: 0900

Bio-mechanical comparison of two different plates in mandibular angle fracture

Dr. Muhammad Ali Thayyullathil, Dr. Jayakumar

Government Dental College Kottayam

Abstract

Background and objectives

Mandibular angle fractures have the highest post-surgical complication rate making them the most challenging to treat. The aim of the study is to compare biomechanical behavior of a single six-hole curved plate with two four-hole plate in the repair of mandibular angle fracture in the goat hemimandible.

Methods

This is an in vitro study done on goat hemimandibles. Here 20 goat hemimandibles were collected and sectioned in the mandibular angle

region in a uniform manner from the retro molar region on a line that connected to the angle of the mandible, and then divided into two groups. These groups were fixed with two different plating techniques: two four-hole 2 mm mini plates, one at superior border and one at inferior border (Group 1), and one 2 mm six-hole curved mini plate using Champy's technique (superior border plating) (Group 2). A custom-made biomechanical test model was used. All the hemimandibles were subjected to compression testing in universal testing machine. A 2 mm displacement point was defined as the end point, and the loads that created this magnitude of displacement were measured on displacement charts. Data were analyzed statistically by unpaired t test.

Results

The mean compressive force that created 2 mm displacement is measured. Analysis showed that two four hole plate fixation have more favorable biomechanical behavior than the single curved six hole plate fixation.

Abstract No: 0991

3-D plates in management of mandibular condylar fractures

Dr. Satya Kumar D

Narayana Dental College

Abstract

Background

Mandibular condylar fractures account for 25–30% of all mandibular fractures, and are one of the most controversial maxillofacial injuries regarding the ideal treatment options. For decades closed reduction has been the most preferred way of treatment, but it requires varying periods of inter-maxillary fixation and has complications like abnormal occlusion, pain, ankylosis, inadequate anatomical reduction, and inadequate ramus height post operatively. The failures and drawbacks from closed reduction led to open reduction and internal fixation with the main aim of surgical management being to restore the function, reduce the fractured segments to anatomical alignment and to establish near normal functional capacity. Various osteosynthesis techniques and devices from Kirschner wirings to single 4hole mini-plates were used in management of condylar fractures. Experimental studies from the literature demonstrated compressive stress patterns along the posterior border of ramus and tensile stress patterns along the sigmoid notch. Therefore three dimensional osteosynthesis devices have been designed to counteract these stress patterns for allowing early function with minimal stress. This paper presents an analysis of the four different 3 dimensional plating systems in management of condylar fractures, namely trapezoidal condylar plate, Delta plate, Inverted Y shaped plate and Lambda plate by assessing maximal inter-incisal mouth opening, occlusion clinically, accuracy of anatomical reduction, stability of fixation radiographically, and other complications like screw loosening, and plate fractures.

Abstract No: 1066**Minimally displaced mandibular fractures: is a new treatment outlook warranted?**

Dr. Neha Jajodia

PGIDS, ROHTAK

Abstract**Background**

While goals of mandibular fracture management remain same, philosophies for treatment continue to evolve. Satisfactory results have been seen with conservative management of adult condylar, ramus, and coronoid fractures and in pediatric mandibular fractures. Not much scientific literature is available for conservative management of fractures of dentate portion of the adult mandible. Management of mandibular fractures involves two major treatment philosophies: closed or open reduction, and a multitude of methods to effect both type of treatments. It is interesting that modern times have not brought a conclusion to this controversy. The main purpose of either of these methods is to primarily approximate the fracture segments, facilitating healing and to stabilize the segments in this approximated position. This concept can be substantiated for displaced fractures, but in minimally displaced or undisplaced fractures where the segments are already in near proximity can similar need for fixation be justified?

Aims and Objectives

The aims of the study were to assess the role of nominal treatment on clinical parameters of undisplaced or minimally displaced mandibular fractures, without compromising on functional and biomechanical outcomes.

Methods

The patients were screened according to the inclusion and exclusion criteria. The diagnosis of a minimally displaced or undisplaced mandibular fracture was made based on clinical and radiological evaluation. These patients based on fracture dynamics and clinical judgement of the senior consultant were treated with one of the following three methods: no intervention, bridle wire placement around fracture site, arch bar stabilization. All these patients were additionally advised to be on a strict soft diet for 1 month while consciously restricting their voluntary jaw opening.

Conclusions

We concluded that a carefully selected group of fractures in dentate mandibular region could be managed conservatively.

Abstract No: 0108**Frontal bone fractures - case series**

Dr. Varun M

Best Dental Science College

Abstract

A case series pertaining to fractures of the frontal bone involving different patterns has been discussed. The primary treatment is to identify CSF rhinorrhea in these cases with concurrent correction of cosmetic deformity. This case series is a compilation of frontal bone fractures with variables like age of the patient, type of fracture, time of intervention and post op follow up. A review of post operative complications to be expected in treating frontal bone fractures has also been discussed.

Abstract No: 0204**Comparison of locking and non-locking plates in mandibular parasymphysis fractures**

Dr. Senthil Murugan P¹, Prof. Dr. M. R. MuthuSekhar²

¹Meenakshi Ammal Dental College; ²Saveetha Dental College

Abstract

The aim of the study was to compare the efficacy of 2.0 mm locking and non-locking plating system in the treatment of mandibular parasymphysis fractures.

Methods

A total of 56 cases which presented with fracture of mandibular parasymphysis and requiring open reduction and internal fixation were selected for this study. They were allotted into two groups of 28 each by block randomization. Group I patients were treated using locking plates and group II with non-locking plates. All the patients were followed up during 1st day, 1st, 3rd and 6th weeks and 3rd month for assessing the post-operative progress. The need for IMF, post-operative infection rates and hardware failure like screw loosening and need for plate removal were examined.

Results

Out of 28 patients in non-locking group (group 1), 2 patients dropped out of the study as they did not complete the follow up. Of the 5 parameters assessed, there was a statistical significance.

Abstract No: 0254**A Comparative evaluation of different treatment modalities for parasymphysis fractures**

Dr. Gourab Das, Dr. Madan Mishra, Dr. Nitesh Kalra, Dr. Abhishek Singh, Dr. Bharat Shukla

ESIC Medical College and Hospital

Abstract**Aim**

This study evaluates the role of lower arch bar as a tension band eliminating the need for an upper miniplate in cases of parasymphysis fractures.

Methods

The present study was conducted on 30 patients of mandibular parasymphysis fracture attending the opd of Dept. of Dentistry and Maxillofacial Surgery or Emergency in ESIC Medical College & Hospital, Joka.

Results

Loosening of screws/plates was not observed in any patient of group I and II at any period of follow up while loosening was observed in group III at follow up on 3rd and 6th month post-operatively. Immediately after surgery, improper reduction of fractured segments was not observed in any patients of group I, 2 (20.0%) patients of group II and 2 (20.0%) patients of group III. Incidence of signs of paraesthesia, at immediate post-operative period was found in 3 patients (30.0%) of group I, 2 patients (20.0%) of group II and none patients (0.0%) of group III post-operatively. At immediate post-operative period incidence of occlusal discrepancy in group II (30.0%) was higher as compared to group I (20.0%) and group III (20.0%). There was no exposure of implant observed in either of the three groups at immediate and 15th day post-operatively. At immediate and 15th day post-operatively wound dehiscence was observed in only 1 (10.0%) patient of group II and none in patients of group I and group

III. Time of surgery in group I ranged from 54 to 58 min while that in group II was 52–56 min and in group III was 40–44 min.

Conclusion

Isolated parasymphysis fractures can be managed by using a single miniplate along with an Erich arch bar for 6 weeks, which will act as a tension band.

Abstract No: 0269

Retreatment of mal-aligned multiple fracture mandible: a case report

Dr. Ajay Desai, Capt Prateek Mathur

Military Dental Centre Shillong

Abstract

Introduction

Mandibular fractures are frequent, and treatment for these fractures involves rigid fixation. Complications can occur after treatment and may require a new surgical procedure; however, there are limited studies evaluating surgical retreatment.

Aim

The purpose of this article was to show the characteristics and the types of treatment carried out in a patient of fracture mandible requiring surgical retreatment.

Materials and Methods

This article depicts a 40 year old individual reported with alleged h/o Road traffic accident (RTA) was operated for Open reduction and internal fixation (ORIF) at private hospital and subsequently reported with inability to chew and swelling over the left side of the jaw. He was treated for revision surgery for realignment of fracture mandible along with closed treatment for unilateral high level condylar fracture and prosthetic rehabilitation of fractured anterior teeth.

Results

There was a satisfactory achievement of the preinjury state occlusion thus avoiding any post surgical dentofacial deformity and comprehensive management of the post traumatic deformity in terms of prosthetic rehabilitation.

Conclusion

Obtaining a stable fracture site allows for adequate bone repair while maintaining mandibular function during the postoperative period. Rigid fixation is a more cost-effective treatment than non-rigid methods. But an inadequate fixation can result in various complications which if managed early with retreatment can bring optimal results.

Abstract No: 0308

Three-Dimensional analysis of morphology after closed treatment of condyle fractures

Dr. Reona Aijima, Keisuke Mori, Daiji Shimohira, Atsushi Danjo, Yoshio Yamashita

Faculty of Medicine, Saga University

Abstract

With closed treatment for condylar fractures, the deviated bone fragments heal in their new positions, and this may subsequently cause a range of functional impairments. However, little is known about the association between healing morphology and post-treatment functional impairment. In this study, computed tomography images of 26 patients (35 sides) who had undergone closed treatment for condylar fractures were used to perform a comparative investigation of three-dimensional (3D) bone morphology before and after treatment. As a result, the morphology of the condylar process after treatment was classified into four different patterns: unchanged, spherical, I-shaped, and detached. Fractures of the condylar head healed in the spherical pattern, simple fractures of the condylar neck healed in the spherical or I-shaped pattern, and comminuted fractures of the condylar neck healed in the spherical, I-shaped, or detached pattern. Additionally, mandibular deviation was greater for the spherical and detached patterns than for the I-shaped pattern. The present results suggest that 3D evaluation of the fractured condylar process is required to elucidate the association with functional impairment after healing.

Abstract No: 0325

Comparison of conventional 2.0 mm miniplates versus 1.8 mm locking plates in surgical management of mandible fractures

Dr. Kapil Tomar

Army Dental Corps

Abstract

Background

The goal of open reduction and rigid internal fixation (ORIF) of mandibular fractures is early restoration of proper function and form by bony union of the fractured segments. Easy intra operative handling, restoring bony strength and anatomical contour defects incurred at the time of injury while controlling infection at the fracture site are factors taken into consideration while selecting hardware/implants for the same.

Aims & Objectives

This study was carried out to evaluate and compare the treatment outcome between 2D locking titanium miniplates (1.8 mm diameter) and conventional 2D miniplates for mandibular symphysis, parasymphysis, body and angle fractures.

Methods

30 patients of fracture mandible were included in this study. The patients were randomly allocated into two groups of 15 each. Group-a patient fractures were treated by locking titanium plates and group-b patient fractures were treated by conventional 2D mini plates. The patients were followed up clinic radiographically at 1 month and 6 months for healing, stability of fracture segments, occlusion, infection and hardware failure.

Results

No patient in group-A had post-operative complication while two patients in group-B had complications, one of post operative peri-implantitis with screw loosening and another of malocclusion. Statistical analysis using Chi square test thus showed a statistically significant difference between the two groups.

Conclusion

We thus conclude that 2D locking titanium miniplates (1.8 mm diameter) are a superior alternative for orif of mandibular symphysis, parasymphysis, body and angle fractures.

Keywords Mandible fracture, locking plates, miniplates.

Abstract No: 0325
Are multiple surgical approaches required for managing condylar fractures?

Dr. Lt Col K Kamalpathey, Brig SK Roy Chowdhury, Col Vivek Saxena, Lt Col Rajkumar K

4 Corps Dental Unit

Abstract

Condylar fractures account for 20% to 62% of all mandibular fractures but occupies a unique and a very debatable place in the realm of Oral & maxillofacial surgery. This is a retrospective analytical study of 10 years data obtained regarding all types of mandibular condylar fractures reported and managed in the Department of Oral & Maxillofacial Surgery, Armed Forces Medical College, Pune. A database search of records from the departmental archiving of patients treated for condylar fractures in the Department of Oral & Maxillofacial Surgery of Armed Forces Medical College, Pune by various maxillofacial surgery teams during the period from 2007 to 2017 was carried out. A total number of 181 cases of mandibular condylar fractures with 143 male and 38 female patients with age ranging from 6 years to 71 years were managed. Surgical management with Open reduction and internal fixation (ORIF) was done in 165 cases (91.16%) and condylectomy was done in 08 (4.4%) cases. The surgical approaches included retromandibular transparotid in 65 sides (30.8%) of 51 patients, retromandibular anterior parotid transmasstetric in 146 sides (69.2%) of 122 patients. No intra oral approach documented. In 30 cases (18.2%) neuromotor deficit of facial nerve injury was documented affecting buccal or zygomatic branches or both. Postoperative salivary fistulae in 12 cases (6.9%). Complications related to surgical approaches were analyzed using Pearson's Chi square-test and Spearman correlations showed high statistical significance regarding facial nerve injury/deficit and salivary fistulae with a *p* Value less than 0.05. In this retrospective study, we conclude that surgical treatment of condylar process fractures are superior to the results of conservative treatment. Retromandibular anterior parotid transmasstetric approach yields excellent results providing adequate access to the fracture site, allowing proper anatomic reduction and fixation with lesser incidence of complications in comparison to transparotid approach and are statistically significant.

Abstract No: 0389
Surgical management of complex midface injury

Dr. Rahul Kumar

Command Military Dental Centre

Abstract

The mid face is defined as an area bounded superiorly by a line drawn across the skull from the zygomaticofrontal suture, across the frontonasal and frontomaxillary sutures to the zygomatico frontal suture on the opposite site and inferiorly by the maxillary occlusion plane.¹Road traffic accidents are the leading cause of mid face injury and

male adult in their thirties are affected most often. The severity and pattern of fracture depends on the magnitude and the direction of the force, impact to the affected part of the area. Fracture of mid face poses a serious medical problem as for their complexity, frequency and their socioeconomic impact. Interdisciplinary approaches and up-to-date diagnostic and surgical techniques provide favorable outcomes in the majority of cases though.²Restoring the premorbid form and function to patients with mid face injury is one of the most challenging task to the operating surgeon. The basic principle in management is accurate reconstruction midface structures in all three dimensions and preservation of all relevant function and esthetics in this area. Moreover the type of intubation is the most important aspect of complex midface injury. The majority patients with midfacial injury undergo secondary correction to achieve form and function which prevents long term consequences such as residual facial deformities, disfiguring scars, or even loss of vision.³The aim of this paper is to review our experience in the surgical management of patient with complex midface injury.

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Abstract No: 0438
Carotid cavernous sinus fistula: a rare complication of craniofacial trauma

Dr. Siddharth D

Mahsa University

Abstract

Cavernous sinuses are paired vascular channels between the dura mater and periosteum. Because of their reticulating network, proximity with other vascular and neural structures, any pathologic changes involving them may affect any or all of these adjacent structures. Carotid cavernous sinus fistula (CCSF) is an abnormal vascular communication between a branch of carotid artery and cavernous sinus. The incidence is 0.17–0.27% following a craniomaxillofacial trauma. Complications of CCSF may include neovascular glaucoma, blindness, cranial nerve defects, uncontrolled epistaxis, worsening pulsatile proptosis and intracranial hemorrhage. An unusual case of CCSF is presented in this paper. The patient sustained an intracranial injury as well as base of skull, mastoid and mandibular fractures. Provisional diagnosis was superior orbital fissure syndrome. However later he developed worsening proptosis, bruit and diminishing visual acuity. Further imaging was done to confirm a CCSF. Embolisation was performed and proptosis, visual acuity improved considerably. Eye movements improved in all directions except lateral gaze. A thorough observation and examination of a patient with craniomaxillofacial trauma is required as we

maxillofacial surgeons can elicit the signs at a preliminary stage therefore ensuring an apt treatment.

Abstract No: 0503

Reconstruction of Orbital Wall Defect: Titanium Mesh vs Medpor

Dr. Deepa B. V., Dr. Manjula S, Dr. Sahith Shetty, Dr. Shyam Sundar S

JSS Dental College and Hospital, Mysuru

Abstract

Introduction

The treatment of orbital injuries represents a challenging area in facial trauma management. Orbital trauma represents 1–9% of facial bone fractures. Fracture of the orbit may lead to enophthalmos, limitation of orbital movement, diplopia. Success of orbital reconstruction depends on meticulous surgical dissection and proper selection of reconstruction material in regard to type, size and contour. Ideal material for reconstruction remains highly controversial. The autogenous bone graft remains the gold standard material for orbital reconstruction, donor site morbidity is considered its major disadvantage. Titanium mesh is a widely used implant material, as it showed success and good results in reconstructing and spanning larger defects. Despite the relatively high cost of porous polyethylene (Medpor), it has advantage over the titanium mesh, its ease of use and its ability to become incorporated in the soft tissue.

Objective

The objective is to review the literatures and discuss the titanium mesh vs Medpor used in orbital floor repair, with emphasis on the advantages, disadvantages and possible new directions for biomaterial evaluation.

Method

A search was undertaken with key words including orbital floor fractures, titanium mesh and medpor implant material used in the repairs. It was narrowed by investigating graft material with outcome evaluation following clinical use.

Results

The general goal for orbital wall reconstruction is to restore the normal anatomical relations of the internal orbit while avoiding complications of the procedure and implant.

Conclusion

This paper concludes that medpor reconstruction has better results than titanium mesh.

References

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Abstract No: 0525

Zygomaticomaxillary complex fracture-our experience

Dr. Kshitij Bang

VSPM DCRC Nagpur

Abstract

The zygomaticomaxillary complex (ZMC) is the cornerstone to a person's aesthetic appearance, by setting midfacial width and providing prominence to the cheek. It can best be anatomically described as a tetrapod as it maintains four points of articulation with the frontal bone, temporal bone, maxilla, and greater wing of the sphenoid. This tetrapod configuration lends itself to complex fractures, as fractures here rarely occur in isolation. In a clinical setting, treatment is chosen based on the anatomy, severity, and stability of the fracture. Like undisplaced fracture will need no surgical treatment, mildly displaced fracture with good stability may be amenable to only indirect reduction and no fixation whereas displaced fractures may need to be fixed at one point to four points with miniplates. Comminuted ZMC fracture may additionally need bone grafting. Also different surgical approaches are there to expose these sites like for infraorbital rim, frontozygomatic suture, zygomatic buttress and arch. In this presentation I will try to cover our experiences in managing these zygomaticomaxillary complex fractures.

Abstract No: 0621

Maxillofacial trauma: restoring aesthetic and function after delayed treatment

Dr. Arun Kumar Mehta

Rama Dental College, Hospital and Research Centre, Kanpur

Abstract

Maxillofacial trauma patient receiving delayed treatment due to so many reasons got affected on results. Patients related to rural areas with low socio-economic status not able to get appropriate treatment at right treatment affects the desired results.

Abstract No: 0665

Role of mandibular 3rd molar and integrity of external oblique line in relation to the resistance of angle and condyle of mandible to fracture “retrospective study”

Dr. Sanjay Kumar Bhagat, Proff. Dr K Sankar, Dr. Manoj

Government Dental College Jammu India

Abstract

Aims/Objective

This study was to investigate relationship between partially erupted or impacted mandibular 3rd molars and risk of fracture of condyle and angle of mandible.

Method

A retrospective study was conducted for 2 years in Government Dental College Jammu and Puducherry. Predictive variables were noted like impacted 3rd molars were measured on orthopantomogram using Pell Gregory classification/Shillers method, outcome variable was presence of condyle and angle fractures of mandible. Chi square and Fisher's t test were used p value < 0.001 were kept as significant

Results

The mean age was 31.8 years mostly males and rta was most common cause. Mesioangular impaction was seen in most of angle fractures, patients with partially erupted 3rd molars had 3.3 times more chance of angle fractures p.

Abstract No: 0783

Comparison of post operative complication between one mini plate and two mini plate in the reduction of mandibular angle fracture - a systematic review and meta analysis

Dr. Bala Jagannath Gupta

Tagore Dental College and Hospital

Abstract

Data sources: an electronic search was conducted for articles written in English listed with Pub Med. The search methodology applied was a combination of mesh terms and suitable keywords.

Variables of interest

Wound healing, hardware failure, scarring and facial nerve weakness. Data extraction: The database search yielded 178 articles out of which 168 articles were excluded because they did not meet inclusion criteria and 12 articles were included for review.

Conclusion

The meta analysis have shown that one mini plate reduces the incidence of wound infection, hardware failure, scarring and facial nerve weakness.

Abstract No: 0846

Topical antibiotic efficacy of vancomycin powder in treatment of infected mandibular fractures

Dr. Geeta Singh

King George Medical University

Abstract

Infected mandibular fractures pose a potential problem in restoration of pre trauma form and function of the mandible. Age old management of prolonged maxillo mandibular fixation and external fixation now had been replaced by debridement, rigid fixation with bone grafting with application of local antibiotics. Thus vancomycin (lyophilized powder) in infected mandibular fractures was used in this study to compare outcome in patients with infected mandibular fractures treated with rigid fixation (case) and without the adjunct of topical vancomycin (control). This study takes sample size of [n = 100] dividing into group A (case) and group B (control) with inclusion criteria of healthy males and

females (25–65 years) requiring rigid and internal fixation and exclusion criteria of vancomycin allergy, systemic disorders and immunocompromised states. Both the groups were evaluated clinically for post operative fever, abnormal swelling, any purulent discharge and fistula formation at surgical site with less complications in group A reported. Vancomycin has been selected as prophylactic topical antibiotic of choice due to its cost-effectiveness, easy-to-use powdered form, and its effective broad coverage against organisms such as MRSA. Routine use of vancomycin powder in surgical site as a surgical adjunct reduces the incidence of infections at surgical site. Small sample size was our main limitation of our study and it requires larger study samples in randomized controlled trials for conclusive results.

Abstract No: 0869

Open reduction and internal fixation (ORIF) of temporomandibular joint (TMJ) by direct trans-parotid approach

Dr. Mohammed Salman Basha

Aster Sanad Hospital

Abstract

The fractures of the mandibular condyle are commonly encountered in our practice. The controversies to open or not to open are still ongoing. We have used both techniques, to successfully manage our patients. Open treatment of TMJ fracture with or without dislocation is technically challenging with satisfactory results. We used a direct trans-parotid approach in treating fracture of TMJ. The aim of this study was to evaluate the effectiveness of this approach for the open fixation of subcondylar/high ramus mandible fractures.

Methods

TMJ fractures were operated using this trans parotid approach with fixation in ten patients over a period of 4 years. The patients were evaluated for facial nerve injury, salivary fistula, scar, function and occlusion over a period of 12 months.

Results

No major complications were encountered intraoperative and post-operatively with acceptable scar.

Conclusion

The direct trans parotid approach appears to be a safe and effective method for the internal fixation of extra capsular condylar fractures.

Abstract No: 0879

Biomechanical evaluation of mandibular angle fracture treated with miniplates

Mrs. G. Shushma¹, Dr. B. C. Sikkerimath, MDS-OMFS, Prof & HOD²

¹Koppal Institute of Medical Sciences; ²Department of OMFS, PMNM Dental College, Bagalkot

Abstract

Background

Osteosynthesis according to Champy's model led to an early functional improvement as demonstrated by biomechanical evaluation of the bite force generated.

Objectives

To evaluate the functional stability of mandibular angle fractures treated with a miniplate osteosynthesis according to Champy by measuring maximum biting force using gnathodynamometer.

Methods

20 patients with isolated angle fracture were treated with single miniplate according to Champy's principles of osteosynthesis. The biomechanical evaluation was done postoperatively using maximal bite force of the subjects at 1st, 2nd, 4th and 6th week.

Results

The mean maximal bite forces of the control group between; the incisors was 164.6 ± 74.6 n, the left molar was 260.5 ± 85.6 n and the right molar was 294.6 ± 94.4 n. The difference between mbf of left and right molar was not statistically significant ($p = 0.356$). In comparison, the study group showed statistically significant values, increasing from the 1st to 6th postoperative week. After 1st week postoperatively only 30% of the mbf found in the controls was observed and thereafter 35, 42 and 55% during the following checkups at 2nd, 4th and 6th week respectively. The mbf of the fractured side is slightly less than that of non-fractured side, but this was statistically insignificant.

Conclusion

The preferred method of treatment for mandibular angle fracture is by using single miniplate according to Champy's osteosynthesis model. The functional stability can be easily accessed by using gnathodynamometer. However, the maximum bite force value even at the end of 6 weeks was significantly less as compared to that of controls.

Abstract No: 0880**Incidence of ocular injuries in midfacial trauma**

Dr. Maj A Navin Kumar, Dr. (Maj) SS Sambyal

Command Military Dental Centre (EC)

Abstract**Aim**

To assess the incidence of ocular injuries in cases of mid facial trauma.

Materials and Methods

A total of 25 cases of clinico-radiologically diagnosed cases of fracture mid-face with suspected ocular injuries were considered for the study. The individuals who were considered for the study underwent clinical evaluation for ocular injuries (corneal abrasion/intraocular pressure/enophthalmos/diplopia/subconjunctival hemorrhage). The evaluation was carried out using standard techniques with use of fluorescein dye with slit lamp examination. Hertel enophthalmometer was used for examination of enophthalmos. The evaluation of diplopia was made using Hess charting and Schiottz tonometer was used for recording intra-ocular pressure. The test was carried out pre-operatively and post operatively which was repeated at 3,6,9 and 12 months intervals. Data analysis was carried out using excel spreadsheet (ms inc) and using appropriate statistical analysis.

Results

There was a predominant male predilection observed in the study, consisting of 88.20% of males ($n = 60$) and 11.80% females ($n = 08$). The incidence of ocular injuries was highest in patients with fracture of zygomatico-maxillary complex (25%) followed by Le fort iii (10.3%), Le fort i (5.9%), pure blowout (5.9%), Le Fort ii (5.9%) fractures of the naso-orbito-ethmoid (5%). The sub type of ocular injuries showed greatest incidence of sub-conjunctival hemorrhage (86.80%) followed by neurosensory deficit (10.30%), corneal

abrasion (5.90%), raised intra-ocular pressure (5.90%), diplopia (4.40%) and least was enophthalmous (2.90%).

Conclusion

There is a substantial incidence of ocular injuries in cases of midfacial trauma which ranges from neurosensory deficit to enophthalmus. Our study concludes that ocular injury evaluation must be the sine-que-non in evaluation of midfacial trauma.

Abstract No: 0919**Treatment of condylar fractures and 3d evaluation of joint morphology**

Dr. Tajamul Ahmad Hakim, Prof.(Dr.) Ajaz A Shah

Government Dental College & Hospital Srinagar

Abstract**Aims and Objectives**

The aim of the present study was to compare closed treatment with open reduction internal fixation for subcondylar and condylar neck fractures with emphasis on three dimensional evaluation of healing joint morphology.

Materials and methods

30 patients were divided into two groups after satisfying the inclusion and exclusion criteria. "in group I patients treated by Maxillomandibular fixation (MMF) using arch bar and elastics for 04 weeks and in group II patients were treated by open reduction internal fixation ORIF. Follow up was done at 1 month, 3 months, 6 months and 1 year. Post operative evaluation included "maximal interincisal opening; protrusion; lateral excursion on fractured and non fractured side; anatomical reduction; pain, malocclusion and evaluation of three-dimensional (3D) bone morphology before and after treatment. Nonparametric data were compared for statistical significance with Chi square test and parametric data with an independent t test.

Results

Regarding mouth opening/lateral excursion on fractured and non fractured side/protrusion, significant (p).

Abstract No: 1132**Superolateral dislocation of bilateral intact mandibular condyles: a rare case series**

Dr. Patil Satish. G

H.K.E.S S.Nijalingappa Institute of Dental Sciences

Abstract**Background and purpose**

The dislocation of mandibular condyle is a clinical condition in which the head of condyle has been displaced out of the glenoid fossa. Complete dislocation of the mandibular condyle can occur in anterior, posterior, lateral and superior direction. Among these dislocations, bilateral superolateral dislocation of mandibular condyles is quite rare and often misdiagnosed. Because of its rare occurrence and unusual clinical course, the best treatment is debatable.

Patients and method

We present the first case series of true bilateral superolateral dislocation of intact mandibular condyles (type 2b) without fracturing the zygomatic arch, associated with symphysis fracture.

Conclusion

This article intends to provide information regarding the possible biomechanics and management of bilateral superolateral dislocation of mandibular condyles associated with symphysis fracture.

Abstract No: 1139**Patterns of assault related maxillofacial injuries in bilaspur chhattisgarh**

Dr. Sandeep Prakash, Dr Ketaki Kinikar Dr Prakash Khare, Dr. Bhupendra Kashyap

Chhattisgarh Institute of Medical Sciences Bilaspur

Abstract

The etiology of maxillofacial injuries varies from one country to another and even within the same country depending on the prevailing socioeconomic, cultural and environmental factors. Assault-related maxillofacial fractures have become more and more frequent and are some of the most important causes of facial fractures. Because of the prominence and accessibility of the face in situations of assaults, maxillofacial injuries are frequently observed in patients presenting to emergency departments. These assaults can be by humans [inter personal violence] or animal attacks. We present a few cases of assault reporting to Department of Dentistry, Chhattisgarh Institute of Medical Sciences [CIMS], Bilaspur, Chhattisgarh resulting in maxillofacial injuries.

Abstract No: 1161**A comparative evaluation of 7 hole plate at lateral border of angle versus conventional miniplate systems for osteosynthesis of mandibular angle fracture: a prospective randomized study**

Dr. Neelam Shakya

Govt. College of Dentistry Indore Madhya Pradesh

Abstract**Introduction**

Management of mandibular angle fractures is one of the most widely discussed topics in maxillofacial literature. The aim of the treatment is to restore the anatomical form and function as well as establishing the pre-operative occlusion.

Aims

To compare the efficacy of 7 hole 2 mm angle titanium miniplate and screw system using transbuccal approach with 2 mm conventional miniplate and screw system using transoral approach for osteosynthesis of mandibular angle fractures.

Objectives

1) To determine efficacy of 2 mm conventional titanium miniplate system and seven hole plating at lateral border for osteosynthesis of mandibular angle fractures in terms of pain mouth opening and

occlusion. 2) To analyse advantages, disadvantages and complications associated with these techniques.

Materials and methods

A total number of 30 patients with mandibular angle fracture attending the opd and emergency of the institute were selected. Patients were randomly divided into 2 equal group of 15 patients each. Group A patients underwent osteosynthesis using conventional miniplate system while group B patients underwent osteosynthesis using 7 hole angle plate at lateral border.

Results

All 30 patients had sufficient follow up for inclusion in this prospective study. Correct placement of the 7-hole angle plate, easily accomplished with adequate assistance, produced no reportable post-operative complications.

Conclusion

Through this study we can conclude that seven hole plating system is a comparable alternative to Champy's technique having advantages of less postoperative infection and more rigidity.

Abstract No: 1165**Evaluation of the ophthalmic outcomes in management of zygomatic fractures**

Dr. G. Srikanth

MCODS, Manipal

Abstract**Introduction**

Zygomatico maxillary complex (ZMC) fractures affect the integrity of the orbital skeleton, and are frequently complicated by injury to the eye, ranging between 4.7 and 90.6% as reported in literature. The paper aims to study the types of ocular injuries in patients with ZMC fractures.

Patients and methods

A study of 527 patients, who had sustained ZMC fractures, was undertaken in the Department of Oral and Maxillofacial Surgery, MCOODS, Manipal from 2011 to 2017 and the patients were evaluated by an ophthalmologist within 1 week of injury. All the patients sustaining confirmed ZMC fracture were examined by an ophthalmologist for any associated ocular injury. In this study patients were divided into three groups according to the site of fracture: group A - patients with zygomatic bone fracture (left, right, bilateral, comminuted, multiple). Group B - patients with zygomatic arch fracture (left, right, bilateral) and group C - patients with both zygomatic bone and zygomatic arch fracture. The variables reviewed included patient's gender, mechanism of injury, visual acuity, pupillary reactivity, extra ocular motility, presence or absence of diplopia, ocular findings, and infraorbital hypoesthesia. Results the common etiology of trauma was Road traffic accident (RTA) (84.1%), followed by falls (16.9%) in our study. Minor ocular injuries such as subconjunctival haemorrhage and corneal injury accounted for most of the cases. Subconjunctival haemorrhage was the most common injury, present in 82.5% of the cases. The other ocular injuries include are hyphema, vitreous haemorrhage, retinal haemorrhage, corneal abrasion, mydriasis, choroidal rupture, retinal detachment, decreased visual activity.

Abstract No: TR6766

Concepts in mandibular condyle fracture

Dr. Navin Kumar Verma

PIDS, GIDA, Gorakhpur, UP

Abstract

Treatment of mandibular condylar fracture, conservative treatment using closed reduction or surgical treatment using open reduction can be used. Management of mandibular condylar fractures remains a source of ongoing controversy in the treatment of maxillofacial trauma. The incidence of condylar fractures are high, but still the management of mandibular condylar continues to be controversial. There are many different methods to treat this fracture. Earlier closed reduction with concomitant active physiotherapy conducted after imf during the recovery period had been mainly used but recent years open reduction with rigid internal fixation has become more popular. Anatomical reduction with bone to bone contact is always for better healing and less post operative recovery period.

Category – Dental Implantology, Pre-implant Surgery and Grafting

Abstract No: 0685

Comparative evaluation of immediately loaded implants bioactivated with or without platelet rich plasma

Dr. Kanubaddy Sridhar Reddy

Narayana Dental College & Hospital

Abstract

Background

Promotion of osseointegration is important for success of implants. Platelet-rich plasma (PRP) is an easy and inexpensive way to obtain growth factors in physiologic proportions that might favour the regenerative process. This study aimed to investigate whether bio-activation of implant surface with PRP could promote osseointegration.

Aim

The purpose of this study was to evaluate the effect of platelet rich plasma on implant stability and bone levels around immediately loaded dental implants.

Methods

A total of 40 patients were selected and randomly grouped into two groups, a study group in which implants were bio-activated with PRP, and control group of implants without bio-activation of PRP. Implants were placed after clinical and radiographic examination in posterior mandibular edentulous region. The patients were followed up at 1 week, 3, 6, 9, and 12 months. The patients were assessed clinically for implant mobility, periodontal status and radiographical assessment of bone height through IOPA and OPG.

Results

The overall mean marginal bone loss was less in the study than in the control group. Soft tissue health was reasonably good during the entire period of evaluation, signifying mild inflammation, at the most nullifying the chances of pathological bone loss around the implant. Clinical mobility was also slightly higher in control group but was statistically insignificant.

Conclusion

Several surface modifications have been developed and are currently used with the aim of enhancing clinical performance. Platelet-rich preparations constitute a relatively new biotechnology for the stimulation and acceleration of tissue healing and bone regeneration with predictable success rate and implant survival rate.

Abstract No: 0842

Clinical evaluation of implant placement by flapless technique over flap technique

Dr. T. K. Divakar

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Abstract

Objectives

This study compares the clinical advantages of flapless implant surgery over conventional flap technique of implant placement by assessing the marginal bone loss in 1 month, 2 month, and 3 month post-operatively, pain assessment, number of analgesics and the post-operative swelling between two groups.

Methods

This study was conducted at department of Oral and Maxillofacial Surgery, Rajas Dental College And Hospital, Tirunelveli. The patients were assigned to one of the two groups - flap (5 patients) or flapless (5 patients). Digital IOPAS were taken post operatively. The parameters assessed were marginal bone loss (measured interproximal bone height), pain, swelling and the number of analgesics tablets taken every postoperative day from the day of surgery to 6 days after surgery. Descriptive statistics done by measures of central tendency (mean) and measures of dispersion (standard deviation), was calculated for all the parameters. Inferential statistics was done by unpaired student's t test to compare the mean difference between the two groups.

Results

The results of this study show that the mean difference in the bone loss for baseline to 3rd month was 0.34 ± 0.05 for flap group and for the flapless group was 0.03 ± 0.004 ($p = 0.000^{***}$). Pain assessment by Visual Analog Scale was statistically significant in all the 5 postoperative days, indicating the better patient compliance in the flapless group. There was no statistical difference in the level of swelling between these two groups.

Conclusion

Within the limitations of this study, it can be concluded that flapless implant surgery results in lesser loss of marginal bone, and also results in better patient comfort. Proper patient selection is essential for carrying out flapless implant surgery.

Keywords Flapless, bone loss, pain, analgesics, swelling.

Abstract No: 0870**Zygomatic implants - immediate loading protocol***Dr Sachin B Rasal**All India Institute of Medical Sciences, Bhopal***Abstract****Objective**

To investigate the modified protocol for immediate occlusal loading of the zygomatic implants, and to report the preliminary results of this modified protocol.

Methods

Four male patients and one female patient with edentulous or partially edentulous maxillae were consecutively treated with the zygomatic implants under general anesthesia. All 5 patients were examined by Computed Tomography, and investigated by the appropriate implant software. Based on the virtual surgical plans, mucosa-supported surgical guides were manufactured by rapid prototyping technique before implant operation. Instead of making a Le fort I osteotomy incision or a crestal incision, buccal vestibular incision was used to expose the surgical site for the zygomatic implant osteotomy and placement. Three patients had their remaining upper teeth removed on the same day as implant placement. One patient had undergone simultaneous placement of upper and lower implants followed by immediate loading. The immediate loading protocol was a 2-stage method using a customized provisional fixed prosthesis.

Results

Ten zygomatic implants and 20 normal implants were installed in these 5 patients. These 5 patients were reviewed regularly for 6 to 10 months after immediate loading. The zygomatic implants were considered to be successful when they were asymptomatic, with no clinical mobility and no sign of infection. All the zygomatic implants and normal implants were investigated individually after removing the provisional prosthesis and were found to be clinically stable and asymptomatic.

Conclusion

According to our observation, immediate occlusal loading of the zygomatic implants has a very good potential for success, as much as immediate occlusal loading of normal dental implants. The surgical placement of the zygomatic implant is simplified and facilitated by making use of the Computer-assisted planning and the Rapid-prototyping surgical guides.

Abstract No: TR0473**Bone regeneration in immediate implants***Dr. Jones S, Dr. Vivek Narayanan, Dr. C. Saravanan, Dr. R. Karthik**SRM Kattankulathur Dental College***Abstract**

Our study was a prospective study of two different membranes, so known as Platelet Rich Fibrin and Concentrated Growth Factor, which are rich in growth factors necessary for osteopromotion. The purpose was, to prove which one has a better osteopromotive character in immediate implant placement in multi rooted tooth socket. They were radiographically analyzed. Bone density was measured using Digora software statistical analysis was done. Both PRF and

CGF were good in bone regeneration all implants osseointegrated well. There was no significant difference between Platelet rich fibrin (PRF) and Concentrated growth factor (CGF) in our study.

Abstract No: 0113**Eggshell derived nano hydroxyapatite “a new era in socket preservation“***Dr.Vivekanand Kattimani, Reader¹, Dr. L Krishna Prasad, Prof and Head, Dean², Dr. E K Girija, Asst.Prof³*

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Abstract**Background**

Socket grafting is need of the hour and several bone graft substitutes are used.(1) still material scientists are in search of economic ideal graft material.(2) so, the study was planned to evaluate bone regeneration potential of a nano-crystalline hydroxyapatite (nha) derived from hen's egg shell.

Materials and methods

NHA grafting done in 23 sockets of 11 patients covered with prf membrane to prevent periosteal releasing incisions. Histomorphometric and micro ct evaluation were performed. Bone width and height were measured radiographically using a digital radiograph (after 1st, 12th and 24th week) and cbct before implant placement.

Results

All patients showed uneventful wound healing. No graft material displacement or leaching was observed, although the graft material was exposed partially. The tissue re-epithelialized completely within 8–10 days with thick gingival biotype (> 3–4 mm). The histomorphometric and micro-ct analysis revealed newly formed bone. Radiographic analysis showed increased density with a trabecular pattern in all sockets within 12 weeks. Many of these sites had successfully placed implants.

Conclusions

The NHA showed good bone regeneration, which can be used for socket preservation in an economical way. The technique described does not require primary closure, and facilitates the preservation of keratinized mucosa and gingival architecture. The nha derived from hen's eggshell will emerge as a novel bone graft substitute. Our study warrants further long term randomized controlled clinical trials.

References

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Abstract No: 0219
Iatrogenic condylar avulsion- viable options and dilemmas

Dr. Kathiravan Selvarasu

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Abstract

Condylar fractures constitute almost 25% of mandibular fractures, which are treated by either conservative management or open reduction and internal fixation. Open reduction and internal fixation (ORIF) has been preferred over the conservative management due to: 1) increase in success rate and sophistication of treatment technologies, 2) owing to declining masticatory efficiency post conservative management. As with any surgery, increase in ORIF also involves increase in complications associated with it. One of the rare complications during ORIF of condylar fractures includes, iatrogenic avulsion of fractured condylar head. Although literature supports fixation of avulsed condylar head over discarding it, protocols regarding iatrogenic avulsion remains a controversy. This paper will discuss about case reports on iatrogenic condylar avulsion and management protocols followed in our unit and also, viable options as reported in literature and dilemmas associated with it.

Abstract No: 0274
A long-term clinical statistical analysis of machined-surface brånemark implants

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Abstract

Dental implants are now being used for longer periods than ever. Consequently, previous clinical studies covering the short period of 5–10 years can be considered inadequate. The noble biocare machined-surface implants used as the first-generation titanium dental implants have been shown to have a lower survival rate than rough-surface implants. Rough-textured surfaces generally help to induce early osteointegration, and various material qualities and shapes are in use. However, implants with these surface textures are vulnerable to infection, and this may cause bone resorption and implant loss. Herein, we report our more than 27 years of clinical experience with the objective of re-evaluating the performance of machined-surface implants. A total of 454 machined-surface implants, of which 38 were lost, were investigated. The cumulative overall survival rate was thus 87.2%. A comparison between the upper and lower jaws showed that the survival rate was 89.0% in the mandible and 85.1% in the maxilla, with a significant difference. However, there was no significant difference in the sort of bone in which they were embedded, with 90.0% embedded in existing bone and 82.6% in grafted bone. There was also no significant difference in the rates of survival of bone grafts between the upper and lower jaws. A four-field-table analysis showed that, in year 27, the rate of success was 26%, with 1% surviving, 65% lost to follow-up, and 8% lost. Extending the follow-up period means that more patients are lost to follow-up, and a range of different

methods must therefore be used for an overall assessment to enable the accurate evaluation of therapeutic outcomes.

Abstract No: 0451
Accidental displacement of an endosseous implant into adjacent craniofacial structures

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Abstract

Report of a Case & Review Update

Aim & Objectives

Accidental displacement of an endosseous implant into the adjacent craniofacial structure is unusual but a serious complication. The author aims to report his experience of a similar case where an implant was displaced into the maxillary sinus & to review the published literature about accidental displacements of dental implants into adjacent craniofacial structures. **Methods:** Author shares his personal experience of a similar case & carries a review on the main online medical data bases looking for published papers about displacement of endosseous implants using key words implant displacement implant migration complication with implants foreign body. **Results:** Twenty-six articles were reviewed, out of these 25 articles reported displacement of dental implant into nasal/para nasal sinuses, orbit & cranial fossa. One published report was also found where an implant was displaced in the sublingual space & was retrieved successfully.

Abstract No: 0468
3D Computed tomography analysis prior to zygoma implant placement - a dress rehearsal

Dr. Sindhu Konakanchi

Mamata Dental College and Hospital

Abstract

Background

Zygoma implants in conjunction with dental implants have successfully overcome the challenge of rehabilitating completely edentulous patients with moderate to severely atrophic maxilla. But the implant procedure demands a thorough anatomical knowledge of zygomatic bone and its associated structures to minimize the risk of complications like accidental penetration to adjacent structures. Also prior determination of orientation and length of implants decreases the surgical time. Evolution of reconstructible (3D) three dimensional computed tomography imaging technique made presurgical treatment planning more precise.

Aim

To assess the role of 3D CT in presurgical zygoma implant placement.

Methodology

We have assessed the correlation between 3D CT findings recorded with mimic software to that of intraoperative findings in the patients in whom one zygoma implant each side was placed. A total of six implant placements were analyzed.

Results

Paired t test revealed differences in findings between both the groups is not significantly different.

Conclusion

Results validate the role of three dimensional computed tomography planning prior to zygoma implant placement.

Abstract No: 0477**Management of edentulous deficient posterior maxilla a prospective clinical study**

Dr. Neetu Aggarwal, Dr. Vikas Dhupar, Dr. Francis Akkara

Goa Dental College and Hospital Goa

Objectives

The aim of this prospective clinical study is to evaluate the efficacy, safety and success of transcrestal, a minimally invasive sinus floor augmentation using an innovative method based on hydraulic pressure with immediate placement of implants.

Materials and method

This is a prospective clinical study of 20 partially edentulous sites in posterior maxilla. Sinus augmentation was done by indirect sinus floor elevation with hydraulic pressure and calcium-phosphosilicate bone graft material. Results: no significant complications were noted during the follow-up period. All the implants were stable except one which was found to be tender and mobile. Post operative bone height gained was 4.61 ± 0.943 mm.

Discussion

In our study success rate after 6 months of implant placement was 95%. This technique has facilitated immediate placement of implants in areas of limited bone height.

Conclusion

Single stage transcrestal maxillary sinus floor augmentation is an effective and safe technique for the placement of implants in moderately atrophied ridges in the posterior maxilla as shown in this study.

References

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Abstract No: 0601**PRF - The Audacity in Autologous Armentarium**

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Abstract

In the emerging era of oral and maxillofacial surgery, the autologous grafts stands as a golden hallmark. platelet rich fibrin (PRF) which is a second generation concentrate comprises of multiple growth factors and cytokines engulfed in the complex fibrin matrix. PRF thereby paves way as a novel approach to be used as tissue engineering scaffold in accelerating both hard and soft tissue healing. PRF is the graft of choice globally as it has numerous advantages like easy procurement, minimal graft rejection, cost effective, less time consuming, etc. PRF has diverse applications starting from head to toe. this paper will be an eye opener for young budding oral and maxillofacial surgeons to use prf in their routine day to day practice.

Reference

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2. De Almeida Barros et al (2018) The use of platelet rich fibrin as a hemostatic material in oral soft tissues. *Oral Maxillofac Surg.*

Abstract No: 0675**Implant lost in the mandible - a case report and review of literature of success and failure of dental implants placed in patients with severe skeletal osteoporosis**

Dr. Mohammad Faisal¹, Dr. Uzma Ansari, MDS²

¹Jamia Millia Islamia, ²Periodontology, King George Medical University, Lucknow

Abstract**Background and purpose**

Osteoporosis is a major skeletal disease affecting millions of people worldwide. Recent studies claim that patients with osteoporosis do not have a higher risk of early implant failure compared to non-osteoporotic patients. The present study reports a case of an implant that was lost in the body of the mandible at insertion due to severe osteoporosis in a post menopausal female patient. The study also comprises of a review of literature of the success and failure of dental implants placed in patients with skeletal osteoporosis.

Methods

Standard procedure was followed for implant placement using a crestal incision and sequential osteotomies. the implant lost in the mandible was retrieved by making a rectangular window into buccal alveolar bone. Both preop and post op cbct were done. For the review a medline (via PubMed) and Embase database was examined for studies in english up to and including March 2018. The examination

included a combination of the mesh terms described as follow: osteoporosis or osteopenia or estrogen deficiency and implant or dental implant or osseointegration.

Conclusion

Patients with severe skeletal osteoporosis display a range of skeletal changes that may bring possibilities of placing dental implants with the need for bone augmentation, osseodensification or prolonging the period of osseointegration, delayed loading and even sometimes prior treatment of skeletal osteoporosis. There is no evidence that suggests osteoporosis may have detrimental effects on bone healing. More over there are no randomized clinical trials available for evaluation and the retrospective nature of the evaluated studies present less evidence of a relation between skeletal osteoporosis and implant failure.

Abstract No: TR2578

Managing deficient bone situations with ptfe: miracle effect in implants

Dr. Nitin Verma

Government Dental College, Amritsar

Abstract

Guided bone regeneration (GBR) is a well-established and generally predictable method for repairing alveolar ridge defects and preparing edentulous sites for implant placement. Standard GBR involves filling the space underneath a membrane with autogenous bone or a mixture composed of autogenous bone particles and allogeneic bone tissue or heterologous biomaterials. The use of a barrier membrane for gbr has sometimes been associated with complications, however reportedly involving exposure, infection, and collapse and the non-resorbable types of membrane seem to be involved more often than the resorbable solutions. Such complications may be severe enough to defeat the object of the gbr procedure. A non-resorbable high-density polytetrafluoroethylene (d-ptfe) membrane has recently used in bone-augmentation procedures that seems to assure a good bone regeneration process to the oral cavity. This case report describes the use of a d-ptfe membrane occurring after a GBR procedure and how it acts as a miracle enabling implants success.

Category – Dentoalveolar Surgery Nerve Injuries

Abstract No: 0573

Closure of oroantral fistula: comparison between buccal fat pad and buccal advancement flap

Dr. Bharat Shukla, Dr. Madan Mishra, Dr. Gaurav Singh

Sanjay Gandhi Post Graduate Institute of Medical Sciences

Abstract

Background

An oroantral fistula (OAF) is an open connection between the oral cavity and maxillary sinus. OAFs are usually caused by extraction of maxillary posterior teeth. OAFs may close spontaneously, especially when the

defect has a size smaller than 5 mm. In case of a small OAF, suturing the gingiva might be sufficient to close the perforation. When this does not provide adequate closure, a flap procedure is the treatment of choice.

Objective

The aim of this study was to compare the clinical results of buccal fat pad (BFP) and buccal advancement flap (BAF) in the closure of oroantral fistula.

Methods

We conducted a 6 months prospective study on 10 patients. Two groups were created with 5 patients each. Diagnosis was based in radiographs and clinical findings (water holding test, cotton swab test). Patients in Group 1 were treated by buccal fat pad, and in Group 2 Buccal Advancement Flap was given.

Results

All fistulas were assessed visually after 1 week, and no wound dehiscence was found. All the fistulas were closed at 1 month follow up, tested by nose blowing. This indicates that both the methods are equally successful for closure of OAF. In general, BFP resulted in more pronounced swelling than BAF.

Conclusion

Patients in both groups were found to have better and fast healing. So, the findings support the idea that BFP and BAF are useful, safe and easy method to close OAF.

Abstract No: 0583

Speed thrills - but does it really kill?

Dr. Pearlsis Siroraj, Dr. GVV. Giri, Dr. S. Ramkumar

Siroraj Hospital

Abstract

An oral and maxillofacial surgeon's day-to-day clinical practice includes procedures like dento-alveolar surgeries, dental implants, orthognathic surgery, maxillofacial trauma fixation and tumour resection. The one factor that unites all these procedures is the osteotomy performed by the surgeon. A surgeon uses high speed power tools to perform these osteotomies, and heat is generated in this process. In this study, we aimed to assess and compare histologically, the damage done to the surrounding bone when the osteotomy tool is used at 20,000 rpm and 40,000 rpm respectively. The criteria assessed were margins of the osteotomy, amount of debris produced, and amount of thermal osteonecrosis to adjacent bone. The 40,000 rpm group had more or less precise margins, with no debris or osteonecrosis of adjacent bone demonstrating its efficacy in performing osteotomies.

Abstract No: 0126

Comparison of indices assessment in difficult impaction - a prospective study

Dr. V. Deepak

Karpaga Vinayaga Institute of Dental Sciences

Abstract

Despite careful planning, surgeons occasionally face intraoperative problems. Preoperative evaluation of the potential for difficulty

allows the surgeon to assess the complexity of a procedure. Methods of measurement for such evaluations have been developed for the most frequently performed procedures in several specialties. The joint efforts of researchers over the past decade have improved the evaluation of the surgical difficulty of third molar extraction; however, most of the proposed methods of evaluation have been based on dental factors alone, determined subjectively and through radiographic analysis. This form of evaluation is no longer appropriate in contemporary medical practice. Current evidence has shown the need to identify clinical, demographic, and radiographic variables that play a significant role in the difficulty of the surgical removal of impacted lower third molars, and several such significant variables have already been reported. The practice of difficulty index assessment is valid tool for the surgeon to perform a surgical removal of impacted tooth under local anaesthesia. our aim of the study is to assess and compare indices between Pederson index and Pernambuco index in case of distoangular impaction and horizontal impaction.

Abstract No: 0221
OMFS and DOLOR Management

Dr. K Gen Morgan

Rajas Dental College and Hospital

Abstract

Pain management is essential in performing a simple minor oral surgery procedure to major maxillofacial and reconstructive surgery. Local anaesthesia remains the backbone of pain control in minor oral and maxillofacial surgery procedures and dentistry. General anaesthesia is generally used for major maxillofacial and reconstructive surgery. Researchers are going to seek new and better means of managing the pain. Most of the researches are focused on improvement in the area of anaesthetic agents, delivery devices and technique involved. Newer technologies have been developed that can assist the oral and maxillofacial surgeon in providing enhanced pain relief with reduced injection pain and fewer adverse effects. This presentation will enlighten the practising oral and maxillofacial surgeon, regarding newer devices and methods of rendering pain control by local anaesthesia.

Abstract No: 0309
Current situation of dentoalveolar surgery in japan

Dr. Yusuke Matsuzawa

Department of Oral and Maxillofacial Surgery, Keiyukai Sapporo Hospital

Abstract

In parameters of care: clinical practice guidelines for oral and maxillofacial surgery of aoms parcare 2012, “dentoalveolar surgery encompasses those surgical procedures that involve teeth and supporting structures associated with the oral cavity” is written. Unfortunately, in japan there are few books clearly describing this field. However, dentoalveolar surgery is a very important field in japan. Because Japanese oral and maxillofacial surgeon is a dental single license and dentoalveolar surgery is an area where there is no

room for other departments of medicine to enter. In western textbooks, dentoalveolar surgery is described for dental infection and neurological disorder besides surgery. Regarding surgery, it starts with tooth extraction, include surgical exposure of impacted tooth, tooth transplantation, and pre-prosthetic surgery. At this symposium, i will give a lecture on two themes. The first one is somewhat special dentoalveolar surgery. I will explain surgical rotation of tooth germ, surgical uplighting of impacted tooth and so on. The second is autotransplantation of tooth. Autotransplantation of tooth became an established treatment procedure in dentistry by Dr. Andreassen’s achievement. However, it is necessary to recognize that autotransplantation of tooth in Europe and it in Asia including Japan are completely different concepts of treatment. In europe, there are a large majority of cases where premolars with incomplete root formation are transplanted to maxillary anterior teeth missing due to trauma and congenital missing of lower premolar site. On the other hand, in Japan, most cases are cases where wisdom teeth are transplanted when molar are lost due to caries and periodontal disease. It was 21 years ago that I performed tooth transplantation for the first time and operated for approximately 2,000 cases to date. This time I will introduce clinical statistical observation, treatment outcome and various cases of tooth transplantation that I had done.

Abstract No: 0581
Recent advance in treatment of mandibular impacted 3rd molar

Prof. Anil Managutti, Dr. Shailesh Menat

Narsinhbhai Patel Dental College and Hospital

Abstract

Third molars generally erupt between the ages of 18 and 24 years, although there is wide variation in eruption dates. The extraction of impacted third molar teeth is one of the most frequent surgical procedures carried out in oral surgery. Surgical procedures for extraction of unerupted third molar teeth are associated with significant morbidity including pain and swelling, together with the possibility of temporary or permanent nerve damage, resulting in altered sensation of lip or tongue, these complications are more common in the mandible than in the maxilla, when surgery is indicated several new concepts and techniques can prevent and or manage some of the common postoperative sequel of impacted third molar surgery. Inward fragmentation technique (IFT) produced lesser incidence of pain, swelling, trismus and was performed in shorter time compared to conventional technique. IFT showed no reduction in height of the lateral or lingual bone walls and entire perialveolar bone architecture was maintained compared to conventional technique. Other newer technique Platelet rich fibrin (PRF) with diclofenac sodium placed in 3rd molar removal socket so postoperative pain, swelling and trismus was lesser compared to conventional technique and post op analgesics consumption also can be reduced and PRF help in bone formation. Forced extrusion technique for removal of impacted third molars close to the mandibular canal. However, the impacted third molar can be moved coronally by orthodontic means, after removal of overlying bone, and safely extracted. The orthodontic intervention slowly moves the tooth apex away from the mandibular canal and reduces the potential for a neural injury. This method may be useful for older patients with root apices that approximate or are actually located in the mandibular canal.

Abstract No: 0604
Rhinoplasty - assessment and surgical technique

Prof. Kokkula Naveen

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Abstract

Being a facial surgeon, rhinoplasty is not been understood by many of us, due to non understanding of the nose, both external and internal nasal anatomy. As a primary surgeon for correcting the facial bones by doing osteotomy procedures, we are equally responsible for the correction of the nose which fulfil the beauty of the face. There are different type of nasal defects we come across like tip deformity, external dome defects like saddle nose, humpy noses, overprojected nose, wide nose, osteocartilagenous defects, cleft nose, etc. Nose job involves understanding and correcting underlying both bony and cartilagenous defects along with the soft tissue correction. Understanding the complex anatomy has an advantage of utilising different grafts from local septum and auricular cartilage which might be sufficient for achieving good and impressive results. For any large defects, correction will require distant grafts from ribs, tibia, iliac bone, etc. clinical acumen will be sufficient to detect what has to be corrected without requirement of any radiological investigations, until unless patients do complain of any breathing difficulty along with the correction of external deformities. Septorhinoplasty is the procedure which corrects both septum and bone internally, which will rectify internal and external anatomy of the nose. Rhinoplasty doesn't have much complications if we follow strict surgical protocol which is desirable for any cosmetic surgery.

Abstract No: 1178
Sequelae of PRF subsequent to surgical extraction of impacted mandibular third molar - a prospective study

Dr. Nandini G D

Sathyabama Dental College & Hospital

Abstract

Objectives

Aim of the study was to assess the effect of platelet-rich fibrin (prf) on postoperative pain, swelling, soft tissue healing & socket complications following the extraction of impacted mandibular third molars.

Methodology

20 patients with bilateral impactions were included in the study. Same surgeon operated on all the patients & as a standardisation protocol sockets of 38 received the prf & sockets of 48 was used as a control group. Patients were followed up for a week for pain using vas, swelling was measured using a 3 point measurement, soft tissue healing using the healing index reported by Landry et al., socket complications were evaluated following the criteria described by Cheung et al. & the number of analgesics consumed.

Results

Significantly less pain on the prf side compared to the control side. less swelling was observed on the prf side. there was a significant statistical difference on the soft tissue healing with prf side. Less socket complications were reported with prf side.

Discussion

PRF could influence the healing of soft tissue overlying the extraction sockets, the Landry et al. Index, was used in the present study. We found the effect of prf on soft tissues healing to be significant, which was in concurrence to Marenzi et al. In this study prf side there was significantly reduced postoperative pain & swelling. there was not much difference with the socket complications.

References

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Category – Head and Neck Oncology

Abstract No: 0127

Orbital exenteration in two different clinical scenario

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Karpaga Vinayaga Institute of Medical & Dental Sciences

Abstract

Orbital exenteration (OE), first described by George Bartisch in 1583. OE is a disfiguring procedure which typically involves removal of the entire contents of the orbit, including the periorbita, appendages, eyelids and, sometimes, a varying amount of surrounding skin. It entails the removal of the eyeball together with its extraocular muscles and other soft tissues. Exenterations can be classified into total, subtotal, and supertotal exenteration. This procedure requires preoperative and postoperative counselling by a multidisciplinary team consisting of an ocularist, orbital surgeon, specialist wound care nurse, and a clinical psychologist. Preoperative counselling with an ocularist is pivotal in deciding on the timing and best surgical approach. OE is indicated in patients with malignant neoplasms of orbital contents, cutaneous tumors with orbital invasion, lacrimal gland malignancies, extensive conjunctival malignancies, other orbital malignancies, mucormycosis, chronic orbital pain, orbital deformities. OE is a disfiguring procedure that may be reduced in incidence by aggressive removal at the time of primary removal. Once performed, the cosmetic rehabilitation is long, with multiple postoperative visits, independent of the method used to close the orbital defect. We present two case reports of patients who have underwent OE and microvascular free tissue transfer, out of which one patient had transformation of keratocystic odontogenic tumour of maxilla to squamous cell carcinoma invading the orbit, which is unusual, and another case had a malignancy in maxilla which involved the orbital contents.

Abstract No: 0201
Medication related osteonecrosis of the jaw - a prospective study

Dr. Shalini Krishnan

A. B. Shetty

Abstract

Background

Medication related osteonecrosis of the jaw (MRONJ) is a rare but dreaded complication associated with bisphosphonate therapy, and more recently with the newer anti-resorptives and anti-angiogenic agents used in cancer chemotherapy. The estimates of the incidence (0–12%) vary due to the rare nature of MRONJ. MRONJ being a relatively new disease entity, the true incidence is underestimated due to the lack of prospective studies. This study was carried out to assess the true incidence of MRONJ in patients on bisphosphonate therapy.

Aim and Objectives

To estimate the true incidence of osteonecrosis of the jaws in cancer patients on intravenous bisphosphonates.

Methods

This prospective, observational study was carried out at a tertiary oncology centre in Karnataka from April 2016 to February 2018. 172 patients diagnosed with malignancy and requiring treatment with bisphosphonates as part of chemotherapy were enrolled in the study. Detailed clinical history and details of chemotherapy was recorded. Intraoral examination was done prior to, during and at the end of treatment. Patients who received radiation therapy to the jaws were excluded.

Results

The incidence of MRONJ in our study was 1.7% (3 patients). Patient 1 was diagnosed with stage0 MRONJ in the right posterior mandible. Patient 2 developed stage2 MRONJ in the right posterior maxilla, following dental extraction elsewhere. Patient 3 underwent dental extraction due to pain after stopping bisphosphonates, but pain persisted and the patient later presented with stage2 MRONJ. Around 35% of our patients succumbed to their malignancy.

Conclusion

MRONJ is an established disease entity but the estimated risk of its development in the Indian population is not clearly known, as most patients present with stage IV malignancy with short life expectancy. Hence the true assessment of the incidence of MRONJ becomes difficult.

Abstract No: 0227
Oncologic outcomes of surgically treated advanced buccal mucosa cancer

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Mazumdar Shaw Cancer Center, Bangalore

Abstract

Objectives

To analyse overall survival (OS) and disease free survival (DFS) for cT4B cohort treated surgically by the mentioned technique, followed by adjuvant treatment.

Methods

This was a retrospective cohort study on the treatment of naive advanced squamous cell carcinoma of the buccal mucosa treated by standard surgical technique, followed by adjuvant treatment, based on the histopathology, during the period 2009 to 2016. Patients had standardised preoperative imaging and were classified based on American Joint Committee on Cancer (AJCC) 7th ed. Involvement of the skull base and intracranial involvement were exclusion criteria. Patients were followed up clinically for evidence of loco-regional or distant disease till the end of the study. The whole cohort was analysed for demographic parameters and histologic parameters such as differentiation, nodal status, margins, bone, soft tissue, muscle involvement and adjuvant treatment to analyse relation with survival patterns. Statistical analysis was done with the SPSS software and Kaplan–Meier curves were used to examine DFS and OS following univariate and multivariate analysis.

Results

277 patients were included in the cohort with 96 patients as cT4A and 181 patients as cT4B. In the cT4B cohort the commonly involved muscle was the medial pterygoid followed by the masseter. Factors affecting OS were lymphovascular involvement and defaulting adjuvant treatment, similarly DFS was statistically correlated with lateral pterygoid involvement and defaulting adjuvant. The OS was 55.3% and DFS was 57.02%.

Conclusion

This large series validates the oncologic efficacy of the compartment resection for advanced buccal mucosal cancers.

Abstract No: 0275
Reconstruction with free flaps - boon or bane

Dr. Shah Seemit Vinod

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Abstract

We have retrospectively analysed 187 cases of oral malignancy which have been treated by same team with various pedicled and microvascular flaps. All the patients were on regular follow-up on monthly to 3-monthly basis for first 2 years. Various factors were analysed, such as size of tumour, depth of tumour, lymphovascular invasion, nodal and extra nodal involvement, peri-neural invasion and post operative concurrent chemo-radiotherapy, along with locoregional recurrence and distant metastasis. The results of direct distant multiple metastatic involvement was significantly larger in group of patients treated with microvascular free flaps as compared to pedicled flaps for reconstruction.

Abstract No: 0419
Significance of lymph node ratio (LNR) as a prognostic indicator in oral tongue squamous cell carcinoma (scC)

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Sri Shankara Cancer Hospital and Research Centre

Abstract

Background

Lymph node status is one prognostic factor in head and neck cancer. The purpose of this study is to investigate the prognostic value of lymph node ratio (LNR) in oral tongue SCC.

Aim

To analyze the significance of LNR as a prognostic indicator in oral tongue SCC.

Methods

A retrospective study was done in 260 patients over 6 year period(2012 - 2017). Patients included were patients with oral tongue SCC, treated with primary excision and neck dissection (extended Supra omohyoid neck dissection (SOHND)/Modified Radicular Neck Dissection (MRND) Patients excluded were primary cases treated with Radiotherapy (RT), Neoadjuvant chemotherapy (NACT), T4B lesions. The endpoints assessed were overall survival(OS), and disease-free survival(DFS).

Results

The median follow up time was 36 months, with a range of 2.6 to 243 months. Patients with high INR had a regional failure with decreased OS and DFS.

Conclusion

The lymph node ratio is an independent prognosticator of survival outcomes in patients with oral tongue SCC.

Abstract No: 0785

Surgical complications in oral cancers; potential risk factors and clinical considerations: a retrospective clinical study

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Park Clinic, Kolkata

Abstract**Background**

Surgical complications resulting from resection and reconstruction of oral cancer can result in delayed recovery and increased financial burden. Identifying common complications and potential risk factors can assist clinicians in modifying treatment strategies for better clinical outcomes.

Objectives

We aimed to identify and evaluate the surgical complications and clinical challenges in oral cancer management and the potential risk factors causing them.

Methods

We designed a retrospective study of patients who were treated in the oral oncology department of our centre from July 2017 to July 2018. All patients irrespective of their age and gender who had been surgically treated for oral malignancy were entered into the study.

Results

A total of 35 patients fulfilled the criteria, of whom 30 were men and 5 were women. Reconstruction done with free flaps and locoregional flaps was 65.71%, 22.85% respectively. The overall complication rate was 63%, most common complication was wound dehiscence (22.85%) followed by partial flap necrosis (8.57%) and infection of neck (5.7%). Flap failure was noted in 2.85% patients, the death rate was 2.85% (n = 1). Sixteen patients had tracheostomies, 75% of whom developed post-op surgical complications, 50% had tracheostomy related complications. There was a significant increase in the duration of hospital stay and post-op complications associated with the use of tracheostomy.

Abstract No: 0952

Evidence based management of intraoral salivary gland malignancy

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MCODS, Mahe, Manipal

Abstract**Background**

Minor salivary gland tumor are relatively rare. Both benign and malignant histological variant arise for minor salivary glands of oral cavity. There is high percentage of malignant variant in respect to minor salivary gland. Wide local excision with reconstruction with or without neck dissection is based on the grade of dysplasia.

Methods

Patients operated in our unit in the last 4 years were kept on regular follow up, every 6 months for benign lesions and 3 months for malignant lesions. There was a female predisposition (4:2). All patients were managed with standard oncological principles.

Results

All patients in both categories are disease free with good post-operative quality of life with median follow up of 2 years.

Conclusion

Minor salivary gland tumors are relatively rare and have high propensity for malignant transformation. If treated with good oncological principles and long term follow up have relatively good outcomes.

Abstract No: 0971

New technique: transposition nasolabial flap for malignant tongue cases

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SPPGIDMS Lucknow

Abstract**Background**

Resection and Reconstruction in malignancies of tongue are done with well established protocols and techniques. Flexibility of tongue tissue allows primary closure of ablative defects many times even in large defects. Microvascular radial forearm is limited choice in such cases other than primary closure which mostly leaves fibrosed and taut tissue with difficulty in tongue movement impairing speech and deglutition post operatively. As maxillofacial surgeon it becomes extremely absorbent to perform micro-vascular reconstruction as continuation of primary resection surgery. This technique might be a useful option of micro-vascular reconstruction in small and medium defects of tongue.

Methods

Routine resection of tongue was done as per oncological principles Attention was to be given in preservation of facial artery and vein during neck dissection. After neck dissection was completed, an anatomic defect was also present after sub mandibular gland resection. A routine nasolabial flap was raised with carefully preserving the facial artery course, till the superior end of nasolabial flap. Superior entry of facial vein was done before lifting the nasolabial flap from its bed along with facial artery and vein. Lower end was also freed and lifted. This flap was pushed below lower border of mandible from

buccal aspect and now inserted into floor of mouth from defect of submandibular region after incising floor of mouth. Now nasolabial flap was sutured to tongue in a similar manner like radial forearm. Routine closure of defect was done and care was taken to not to compress the pedicled vessels to avoid necrosis.

Results

Excellent results were observed similar to radial forearm in this technique. Selection of size of defect and iatrogenic injury to blood vessels are important factors for selection of this technique.

Abstract No: 0265

The prognostic factor of lnr in node-positive patients with oral squamous cell carcinoma (oscc)

Dr. Yasumasa Kakei, Tsutomu Minamikawa, Takumi Hasegawa, Masaya Akashi, Takahide komori

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Abstract

Background

The presence of positive lymph nodes in the neck is a significant predictor of poor survival outcome in oral squamous cell carcinoma (oscc). However, among oscc patients with positive neck nodes, nodal stratification may not necessarily predict prognosis. Lymph node ratio (lnr) is superior to tnm nodal status in predicting after surgery for carcinoma of the bladder and esophagus cancers. Recently, lnr was found to reliably predict poor survival outcomes in head and neck cancer. Little is known about whether lnr can predict survival in patients with oscc. We therefore evaluated utility of lnr for predicting survival for oscc patients with positive nodes. Methods. We reviewed the clinicopathologic data of 160 oscc patients with positive nodes who underwent oral cancer resection with neck dissection at the department of oral and maxillofacial surgery, kobe university hospital, between 1999 and 2016. All lymph nodes harvested from neck dissection were carefully examined, with lnr calculated as the ratio of positive lymph nodes to total lymph nodes removed. Univariate analysis and multivariate analyses of variables predicting disease specific survival (dss) were performed for patients with positive nodes. Results. In the roc analysis, the optimal cut-off value for the lnr was 9% for dss. Kaplan–meier analyses showed that the 5-year dss rate in lower and higher lnr patients were 68.1% and 31.9%. univariate analysis showed that number of positive lymph nodes, extra nodal extension (ene) and lnr (> 0.09) were significant predictors of dss. Multivariate analysis showed that prognostic variables were ene (hr = 3.26, 95% CI = 1.9–5.6; p.

Abstract No: 0320

Survival outcome in t3-t4 squamous cell carcinoma (SCC) of mandible

Prof. Ashish Sharma

Kothiwal Dental College and Research Institute

Abstract

Background

t3-t4 SCC are those which are > 4cms or spread to the nearby structure. Treatment consists of combination of surgery, radiation, chemotherapy or all the three.

Methodology

- 22 cases of scc mandible with t3-t4 sizes were treated with combination of surgery and radiation. All patients were followed up for a period of 5 years and were evaluated for survival.

Results

- 70% cases showed 5 year survival with combination of surgery and rt.

Conclusion

Surgery with rt is a good option for t3-t4 scc of mandible.

Abstract No: 0549

Melanotic neuroectodermal tumour of infancy: a rare entity

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Amritha Institute of Medical Sciences, School of Dentistry

Abstract

Even though oral pathologies are common in paediatric population, some of them may be confusing to the clinicians. Substantial knowledge and detailed clinical examination is essential for precise diagnosis and management of lesions especially in younger age group. An infant was presented with a rapid growing large painless swelling of the anterior maxilla which results in gross upper lip eversion. A primary tooth was present the tumour which grew out of the mouth. Several episodes of bleeding associated with minor trauma was reported. The firm dome shaped, smooth swelling was slightly mobile, but not disturbing airway or feeding. After clinico-radiologic examinations, he was diagnosed with Melanotic neuro ectodermal tumour (MNET) of infancy which is a very rare benign tumour usually presenting with same features as mentioned above. Total excision of the lesion was performed followed by histological examination ascertain the clinical diagnosis. Earlier reports on this lesion described this lesion as a biphasic, neuroblastic and pigmented epithelial neoplasm. There is a substantial risk of recurrence which should be managed with excision and/or radiotherapy. So close monitoring with clinical and radiographs is necessary for early detection of recurrence and management.

Reference

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Abstract No: 0695

PEC major myocutaneous flap still a workhorse in the era of microvascular surgery

Dr. Kishore Kumar R. V., D. Nageswar Rao Surgical Oncologist, Dr. Rama Mohan, General Surgeon, Dr. Sathya Kumar HOD OMFS

Narayana Dental College & Hospital

Abstract

Purpose

This article retrospectively reviews 147 consecutive pectoralis major flaps used in oral and maxillofacial reconstruction with respect to reliability and complications.

Patients and methods

147 cases of reconstruction of post cancer defects of the oral cavity done were analysed. The age and sex of the patients, site of defect, design of the pectoralis major flap and complications encountered were analysed.

Results

There were 15 (7.5%) complications in terms of partial flap loss, total flap loss, skin paddle sloughing, infection, recurrence at flap site etc. Observed.

Conclusion

The pectoralis major flap is simple, reliable, and robust and the complications seen in this series were comparable to other large series in the literature. In the era of micro vascular reconstruction, the pectoralis major myocutaneous flap remains an excellent reconstructive choice for large tissue defects in the oral cavity.

Abstract No: 0984**Tumor thickness and depth of invasion-analysis in AJCC for oral cancer**

Dr. Atish Kundu

Rama Dental College Hospital and Research Center

Abstract**Introduction**

Oral squamous cell carcinoma has locoregional evolution with frequent neck involvement. Tumor thickness is defined as a distance from surface of tumor to the deepest portion of its invasion and the depth of invasion is defined as a distance from theoretically reconstructed normal mucosal line to the deepest portion of its invasion.

Objectives

The primary aim of this study is to compare the effect of using tumor thickness versus depth of invasion to determine the 8th edition American joint committee on cancer staging on survival in oral Squamous Cell Carcinoma (SCC).

Material and method

This study is conducted in 267 patients which have come to department of head and neck oncology. Their histopathological data was gathered and compared between thickness and depth of invasion and their effect in change in t and n staging was done. A review of the studies analyzing a tumor thickness and depth of invasion in predicting regional metastases and survival was undertaken.

Results

Tumor thickness or depth of invasion is a reliable parameter for predicting regional nodal involvement and survival in SCC.

Conclusion

There is a major impact on post operative treatment as slight differences could be a deciding factor for post op radiation.

Abstract No: 1006**Marginal versus segmental mandibulectomy for oral squamous cell carcinoma: current concepts and controversies**

Dr. Madan Mishra

Sardar Patel Dental College

Abstract**Introduction**

A lot of controversies exist till date regarding the type of mandibulectomy (marginal and segmental) in patients with oral squamous cell carcinoma (OSCC). Objective this paper tries to clear the ambiguity between marginal and segmental mandibulectomy for patients with OSCC in an attempt to improve the outcomes and prognosis.

Methods

Retrospective study to compare the various outcomes and prognosis in patients who underwent either marginal or segmental mandibulectomy for OSCC along with review of world english literature.

Result

The accurate mandibular involvement by OSCC is often difficult to judge preoperatively despite various advancements in the current investigation modalities. Based on our experience and current world english literature marginal resection should be reserved for no cortical invasion or early cortical invasion.

Conclusion

Careful case selection will result in favourable oncologic outcomes with marginal and segmental mandibulectomy. Marginal mandibulectomy may produce acceptable disease control and is as effective as segmental mandibulectomy for selective cases.

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Abstract No: 1083**Mandibular swing approach to tongue cancer – an institutional experience**

Dr. Ankit Khandelwal, Dr Aniruddha Dam, Dr A Bhowmick

Chittaranjan National Cancer Institute

Abstract**Background/Purpose**

Carcinoma of oral cavity often needs adequate exposure for achieving wide margins. At our institute mandibular swing is usually used for access surgery. The aim of this study was to access immediate, short

and long term complications of this approach.also to find out which approach was preferred by different surgeons.

Methods

A retrospective study of the hospital records of all patients who had been operated for tongue carcinoma including base tongue from March 2013 till March 2018 was performed. These were sub classified according to the approach used with tumor size. Records were accessed for local complications faced post operatively during the hospital stay and follow-up visits. Oncological outcomes were accessed through histopathology reports. A questionnaire based study with various case scenarios presented was also performed among surgeons from different institutes and specialties who performed surgery for oral cancer to find out which approach was preferred and why.

Results

A higher rate of tumours with involved/close margins was found in the per oral group with tumor size t2 and above with mandibular swing complications like tooth mobility/loss, wound sepsis/fistula and plate exposure/screw loosening were noted but rare. Osteonecrosis was suspected in two patients but not at the osteotomy site. None had bony non-union, malunion, or malocclusion. Surgeons chose different approaches for similar case scenarios.

Discussion

Approaches like mandibular swing, visor's flap and lip split gives better oncological outcomes to the posteriorly based, oropharynx and large tongue tumors. Mandibular swing has minimal manageable local complications. Surgical methods are sensitive to surgeon's experience/training, patient characteristics and institutional protocol conclusion mandibular swing is a safe and simple procedure which can be used by all in cases where indicated.

Abstract No: 1144

Oral verrucous carcinoma: a case report and review of literature

Dr. Vini Kaila, Dr Kishore Moturi Professor and Head Vishnu Dental College

Vishnu Dental College

Abstract

Oral verrucous carcinoma is a rare well differentiated variant of squamous cell carcinoma. These lesions generally measure < 1 cm in largest dimension and appear as pink to white exophytic granular or cauliflower like surface alterations and may be pedunculated or sessile in configuration. For the lesions occurring on the palate, gingiva and tongue, the rate of malignant transformation is high. An accurate diagnosis of oral verrucous carcinoma is challenging and requires an adequate biopsy specimen. Though being noninfiltrative, these lesions are usually associated with high recurrence rate. Local resection with 1 cm of clinical margin is considered the treatment of choice for verrucous carcinoma. Need for a cervical neck dissection is controversial. In this paper, we report a case of oral verrucous carcinoma on gingiva and discuss various diagnostic and treatment modalities.

Abstract No: 1166

Various reconstruction modalities for carcinoma of tongue

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Abstract

Carcinoma of the tongue implies quite significant mortality and morbidity rates in the oral malignancy and most commonly occurring neoplasm among the all intraoral tumours accounting for about 30% of the all oral malignancies. As the recent advances and research has proved that tongue cancers have high propensity for metastasis to the cervical lymph nodes and the risk of nodal metastases increases as t stage increases. This paper reviews the management of squamous cell carcinoma of tongue including various recent advances introduced in the management including partial glossectomy, hemiglossectomy and total glossectomy followed by indicative neck dissection that should be taken into consideration with the aim of improving regional control along with various soft and hard tissue reconstruction modalities including radial forearm flap, anterior lateral thigh flap, pectoralis major myocutaneous flap or free fibula flap for mandibular reconstruction.

Abstract No: 1102

The efficacy of g47 in treating mouse tongue cancer models

Dr. Toshihiro Uchihashi, Akinari Sugauchi, Yasushi Ino, Mikihiko Kogo, Tomoki Todo

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Abstract

Primary treatment for oral squamous cell carcinoma (oscc) is surgical excision, but it is usually insufficient to cure patients and often results in severe Quality of life (QOL) impairment. G47?, an oncolytic HSV-1 with triple mutations, exhibits augmented viral replication in tumor cells, enhanced induction of systemic antitumor immunity and high safety features in normal tissues. The in vitro efficacy of G47? Was evaluated by cytotoxicity assays and replication assays using oscc cell lines. The majority of human oscc cell lines tested was susceptible to G47? And showed high virus yield in vitro. For in vivo studies, athymic or immunocompetent mice harboring orthotopic tongue tumors were generated using human oscc cell lines or mouse scc cell lines. In athymic mouse model, the survival of mice treated with G47? Was significantly longer and the number of neck lymph metastases significantly lower than those treated with mock regardless of the timing of treatment. The replication of G47? In lymph node metastases was detected by immunohistochemistry and real time pcr. We generated a new orthotopic tongue tumor model using mouse scc cell line kln205-muc1. This model reproduces the clinical course of oscc progression; cervical lymph node metastases followed by lethal lung metastases. In this study, we investigated the capability of G47? To suppress neck lymph node metastases when injected into the primary tumors. Mice bearing kln205-muc1 tongue tumors treated with G47? Survived significantly longer than those treated with mock. These results suggest that G47? Injection into tongue tumors was efficacious

not only for inhibiting the growth of primary tongue tumors but also for suppressing neck lymph node metastases in mouse oscc models. The results indicate the use of G47? May become an effective new therapeutic approach for oscc patients.

Category – Miscellaneous

Abstract No: 0349

The maxillo mandibulo zygomatico fronto naso orbito ethmoidal surgeon

Dr. Arjun Shenoy

Elite Hospital

Abstract

“A rose by any other name would smell as sweet” is a popular reference to William Shakespeare’s play. Unfortunately same does not hold true for larger things in perspective. The face has fourteen bones. A profession who deals with surgery involving these bones today gropes in the dark to carve an identity for himself in the public domain. Successful brands have always structured their story telling by converting complex ideas into simple concepts that have stood the test of time. The maxilla belongs to the face, however the term maxillo-facial seems to disagree. It is similar to the term frontal lobe brain surgeon. The identity crisis it creates has been blissfully ignored for decades. Adding more chaos to the element are the terms cranio-facial, faciomaxillary and many more that seem to sprout up over every passing decade. Making the product simpler always pays rich dividends. Had not otorhinolaryngologist been called ENT surgeons, much of them would have had lengthier conversations explaining what they do for a living. For a profession that already suffers from an identity crisis with both the dental and medical prescribed norms of practice across the continents, the tongue twisting convoluted name needs introspection. This paper addresses the need to come up with a tangential approach to a half-century old problem of confusing synonyms the facial surgeons have endured. It is time we branded ourselves the right way.

Abstract No: 0371

Effectiveness of botulinum toxin a for treatment of hemimasticatory spasm

Dr. Abhishek Singh

All India Institute of Medical Sciences, Patna

Abstract

Background

Masticatory spasm of Romberg’s, as coined by Gower’s in 1897, is also known as hemi masticatory spasm, is many times confused with other facial movement disorders such as hemifacial spasm (HFS), temporomandibular disorder (TMD), oromandibular dystonia (OMD). The HMS is usually characterized by paroxysmal involuntary contractions of one or more of the closing muscles of the jaw such as the masseter, temporalis, and medial pterygoid. It usually affects one side

of the face due to dysfunction of the motor branch of the trigeminal nerve, with an unknown etiology.

Case Report

A 49 year old male patient reported with a history of recurrent spontaneous spasm, involuntary contractions of the jaw with sporadic injuries to the tongue, and with a strange sensation in the preauricular region. A detailed history of the patient revealed that patient had bitten his tongue many times during these episodes, which had gradually increased up to 25 per day, with each episode lasting for about 20 s.

Discussion

The etiology of HMS is still unknown, and with the etiology unknown, the treatment becomes a challenge for the physician. The use of botulinum toxin A has become a milestone in treating such conditions, with an excellent result.

Conclusion

This paper describes a challenge for the treating physician to differentially diagnose such type of conditions with accuracy, and how to provide relief to his/her patients, with limited available knowledge to us.

Keywords Hemifacial spasm, TMD.

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Abstract No: 0457

Stress in Surgery

Dr. Mimansa Bhoj

Saveetha Dental College

Abstract

Aim

To assess the level of occupational stress in Oral and maxillofacial Surgeons in India and to evaluate the associated factors.

Methods

A pre-tested questionnaire (Maslacha’s burnout inventory) with 21 statements relating to occupational stress was mailed to 2000 Oral and maxillofacial surgeons using computer generated random number selection, across the country. 978 responses were received, out of which 32 outliers were excluded. The final sample size was 946. The frequency of stress was scored using a seven point scale. The survey was coded and data entry was done in Microsoft Excel 2010. Data analysis was done using excel 2010 to calculate the mean score for each factor and also for calculation of overall mean for the stress levels in oral and maxillofacial surgeons. The data was compared for male and female surgeons as well as causative factors in different years of practice experience. SPSS software (version 20) was used to perform t-tests to compare stress levels in males and females.

Results

The overall stress rate in oral and maxillofacial surgeons was 50.33%. There was no significant difference between the males and females. The most potential stress factor was found to be the physical exertion due to work. A positive correlation was made between low job satisfaction and higher stress levels.

Conclusion

More than half of the oral and maxillofacial surgeons were found to be under stress due to work. The causative factors for the same showed variation for male and female surgeons. Doctors can indulge themselves in physical exercises, recreational activities and meditation in order to combat occupational stress.

Abstract No: 0934

A Study on simulation of bacterial contamination from contact with inanimate surface of dental chair by using glo-germ

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Vishnu Dental College

Abstract**Background**

Infection control is highly stressed in today's practice. The presence and quantity of microorganisms on inanimate objects is well established. The ability of microorganism to survive on an inanimate object contributes to its virulence and likelihood of transmission. Common pathogens can persist on fomites and can then serve as vector for cross contamination. Sterile towels, gloves and barrier films are often used in dental teaching schools to hold or adjust a nonsterile object (e.g. light handle, tray handle, loupes) during procedure, as a barrier for maintaining sterility. So, to evaluate the efficacy of these three barriers, a comparative, cross sectional study was designed.

Aim

To assess the efficacy of three barriers in bacterial contamination from an inanimate object of dental chair to the operator gloves.

Methods

Sixty students were categorized into three groups of 20 each, group a with sterile green towel, group b with latex glove and group c with barrier film. Approximately 3 g of glo-germ powder was spread onto plastic surface that serve as proxy for light and tray handle. Glo-germ powder has particles with same size as microbes (0.5–4.0 µm in diameter) and thus replicate transmissibility of bacterial species through barriers. Individual glo-germ particles are visible with UV light. With a new pair of gloves, the barrier was laid on the inanimate surface, which was then held with a gloved hand. The operators gloves were then inspected under UV light to identify the presence or absence of glo-germ powder on the glove.

Results

The data was subjected to statistical analysis using the chisquare test.

Conclusions

In this study, the efficacy of three barriers was evaluated by simulation of bacterial contamination from contact with inanimate surface of dental chair by using glo-germ powder.

Abstract No: 0103

Stage the surgery, diseases vs surgeon's point of view

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Rajah Muthiah Dental College and Hospital, Annamalai University

Abstract

There are plethora of pathologies & disease in head & neck regions which needs surgical management. The planning of surgery is basically done by depending on the severity of diseases, site of involvement, age of the pt & histopathological outcome. But surgeons are always left with the dilemma in handling invasive bigger lesions in younger individuals, especially like in benign oral tumors. The concept of staging & dredging is always an alternative for operative surgeon. This paper highlights the disease vs surgeon's point of view on staging surgical treatment in such benign lesions.

Abstract No: 0173

Comparative analgesic efficacy of iv paracetamol and dexmedetomidine in inpatient oral and maxillofacial surgery

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Abstract**Background**

Excessive intraoperative dependence on opioids is fraught with the danger of respiratory depression. This is especially relevant for oral and maxillofacial surgeries with associated surgical edema and inflammation. Dexmedetomidine, an α_2 -adrenoceptor agonist, has been used as an anaesthetic adjunct.

Aims and objectives

To compare the intraoperative and postoperative analgesic requirements amongst patients undergoing inpatient oral and maxillofacial surgery who receive iv paracetamol versus iv dexmedetomidine.

Methods

64 patients were recruited and divided into two groups for this double-blinded study. Patients were randomized to receive a preoperative dose of either iv paracetamol 1 g (group P) or iv dexmedetomidine 1 µg/kg (group D). Baseline sedation scores (Ramsay), maximal interincisal distance and pain scores (visual analogue scales) were assessed in both groups just prior to and after the administration of the study drugs. Group P and group D received a maintenance dose of normal saline and dexmedetomidine (0.5 µg/kg/hr) during the intraoperative period. Following extubation, post-operative pain scores and the time to request for first analgesic dose in either group was recorded.

Results

The time taken to perform the surgery was comparable in both groups. There was a significant difference in visual analogue scores and interincisal distance after the bolus dose ($p < 0.05$). No adverse cardiopulmonary events were observed.

Conclusion

Both iv paracetamol and iv dexmedetomidine provide comparable intra-operative analgesia, hemodynamic stability, safety profile and can be considered for inpatient oral and maxillofacial surgery.

Abstract No: 0307**Perioperative oral function management of oral cancer patients**

Dr. YUHJI KABASAWA

Tokyo Medical and Dental University (TMDU)

Abstract

Oral care by volunteers by dental hygienists has been conducted at our university (TMDU) since 2004. In this study, from April 2013 to August 2017, we investigated the role of dental hygienists in peri-operative oral function management. The analyzed problems are as follows: (1) the implementation status of perioperative oral function management in medical diseases and dental diseases, summary on calculations of medical expenses performed by dental hygienists, (2) the problems that dental hygienists concerning important in perioperative oral function management. A free description questionnaire was conducted and analyzed using a qualitative research method (scat). As a result, in medical hospital, it seems that there are many patients in oral and maxillofacial surgery department, hematology department and pediatrics department, as a result of increasing direct relationships such as organizing lessons by dental hygienists and dentists. From the questionnaire, the dental hygienist feels rewarding that the patient will be thankful that the problems in the oral cavity have been improved. There are also points to be improved such as the hospitalization period is shortened. In addition, there were many opinions that after surgery, patient follow-up after discharge and cooperation with regional medical institutions should be planned. It was considered necessary to cooperate with social welfare system, including the problem of medical disparity due to patient's economic reasons. In addition, there are many ways who consider dental hygienists' participation in discharging support and palliative care as a subject, and it is considered to be a priority to consider in the future. In the future, in order to more actively manage oral function to medical diseases, a dental hygienist can screen the sources of intraoral infection at the perioperative center (preoperative anesthesiology department or outpatient chemotherapy room).

Abstract No: 0346**Radiology & The Maxillofacial Surgeon**

Dr. Alexander Mohan

Mahsa University

Abstract

Like the rest of the medical/dental specialties, radiology has been a boon for the maxillofacial surgeon also. It has been used to find out the reason for symptoms, confirm our clinical diagnoses, plan treatments as well as to know the results of our treatments - surgical and otherwise. There seems to be quite a few radiological methods that

can be made use of, but the question is are we making optimum use of the available ones. This paper hopes to analyze this question in a dispassionate way.

Abstract No: 0567**The Contingency of the Unknown Hand in the Surgical Field**

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Bapuji Dental College & Hospital

Abstract

Surgical gloves constitute part of the most exposed barrier material, as one half of accidental exposures to blood in the operating room involve the hands. Approximately 15% of gloves, tested at the end of the operation were found to be perforated. Although surgical glove are initially impermeable to various viruses, the porosity increases with the duration of use. This porosity is related to hydration and deformation of latex fibres. In 1897, Jan Mikulicz, a Polish Austrian surgeon, was first to use a surgical mask and gloves during surgery. Medical gloves are made of different polymers including latex, nitrile rubber, polyvinyl chloride and neoprene; they come unpowdered, or powdered. Surgical gloves fail or deteriorate for two main reasons: their inherent physical and chemical properties and the conditions under which they are used. Each medical purpose for which a pair of gloves is used is unique. Sterile latex surgical gloves are anatomically shaped for precision touch, comfort and to lower hand fatigue. The sterile nitrile surgical gloves are made up of premium nitrile rubber offering good resistance to chemicals surgical gloves used in gynaecology come in both latex and nitrile forms up till elbow level with different specifications and characteristics. The orthopaedic surgical gloves provide extra protection, unique brown color minimises eyestrain in the OT providing good contrast to light colored organs and improving visibility. Maxillofacial surgery involves several sharp instruments and fixation materials, is constantly at a high risk for cross contamination due to perforated gloves. The frequency of perforation of surgical gloves in maxillofacial surgery, including orthognathic surgery was assessed by the hydroinsufflation technique.

Abstract No: 0663**OMFS Practice Management**

Dr. Dinesh Kumar S

Jyothi Facial Surgery Speciality Clinic

Abstract

An oral and maxillofacial surgeon (omfs) starts with the basic surgical skills acquired in postgraduate institute, only trained to do surgery. A successful omfs practice is amalgam of surgical expertise and business talent, both values are inseparable. They exist in all types of surgical practices, every hour of everyday. An immense degree of variation in the level of business talent exhibited by surgeons. It is not enough to be a good surgeon. A successful practice is not built solely on skills in the operating room. A misfit surgeon will find himself surrounded with unhappy people. Patient will ascertain the

atmosphere and go elsewhere. Proper business approaches can be imbibed through experienced surgeon, through formal education or at the university of life. Building an omfs practice, advancement in the working conditions of the employee to the safety of the patients must be developed with improvement in surgical skills, employees skills, facilities, increasing patient satisfaction, proving his or her worth to payers. Author presents his personal experience of last 10 years and an overview of the workings of the business aspect of the oral and maxillofacial surgery practice in india.

Abstract No: 0800

A one year retrospective analysis of patients treated in the dental department of a medical college in tripura

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AGARTALA GOVT MEDICAL COLLEGE AND HOSPITAL

Abstract

Background

The department of dentistry in a medical college plays an important role in both academics and in providing proper treatment to patients suffering from various dental and oral diseases. In a state like tripura, where there is no dental college the significance of the department increases even more.

Aims and Objective

To study the prevalence of various types of diseases and their treatment in the department of dentistry in agartala government medical college in tripura.

Materials and Methods

The data was collected retrospectively from the records of the department for a period of 1 year from may 2017 till April 2018. The patients were evaluated on the basis of disease, gender and type of treatment provided.

Results

Out of 3335 patients treated, 56% were female and 44% were male. In terms of disease 75% were suffering from irreversible pulpitis and had undergone extraction. 12% had undergone restoration for carious teeth. 6.5% had undergone oral prophylaxis for periodontitis. The remaining 7% of the patients consisted of trauma(3.3%), impactions(1.5%) and other pathological lesions and infections of the oro facial region. Total of 13 patients were treated under general anesthesia which consisted of odontogenic cysts, ameloblastoma, fracture of facial bones, TMJ ankylosis and salivary gland sialolitis.

Conclusion

It has been observed that almost 80% of the cases treated in the dental department of our medical college falls under the purview of oral and maxillofacial surgery. In spite of the many advantages of oral majority of the trauma patients had to be treated with IMF due to non availability of major OT, which was allotted only once every month. In this context it may be concluded that the speciality of oral and maxillofacial surgery is of paramount importance in the dental department of any medical college.

Abstract No: 0932

Innovation in healthcare: why it's needed and where it's going

Dr. Manu Prasad S

Farooqia Dental Collage

Abstract

Over the past several decades, thanks to improved diagnostic and therapeutic options, healthcare has experienced an explosion of innovations designed to improve life expectancy and quality of life. As healthcare organizations face unprecedented challenges to improve quality, reduce harm, improve access, increase efficiency, eliminate waste, and lower costs, innovation is becoming a major focus once again. Under our present system, just doing our best or working harder will not be enough. The healthcare industry is on the brink of massive change.

Abstract No: 1176

The agony of trauma: maxillofacial perspective

Dr. Amiya Agrawal, Dr Siddhartha Chandel, Dr Arunesh Kumar Tiwari

King George's Medical University

Abstract

The agony of trauma: maxillofacial perspective.

Background/Introduction

Anecdotal evidence suggest that subjects experiencing trauma and more so assault and facial trauma suffer from a range of psychosocial outcomes and because of lack of established protocol in addressing these problems and because of sparse literature evidence and epidemiology data these problems are neither assessed nor addressed.

Aims

To establish the persistence and prevalence of psychosocial disturbances in trauma patients in general and maxillofacial patients in specific and to compare the outcomes in these two groups.

Methods

Participating subjects were allocated in 3 arms (maxillofacial non maxillofacial and poly-trauma) at King George's medical university Lucknow in patient admission wards of oral and maxillofacial surgery and trauma surgery. 125 subjects completed questionnaires, follow-up was at 3 months (n = 50) 6 months (n = 75). Standardized tools were used to assess symptoms of post traumatic stress- and scale, ptsd-checklist had and derriford appearance scale. Data analysed in logistic and linear regressions.

Results

Ptss and depressive symptoms affected 28% and 33% respectively at baseline at 6 months 27% and 31% respectively reported the symptoms. Assault injury was associated with increased ptss (or 6.44 cl 1.75 to 23.75), depressive symptoms (or 4.78, cl 1.41 to 16.18) and appearance concern (? 2.78 cl 0.09 to 5.47).

Conclusions

There were high levels of determinants of psychosocial outcomes in this sample. Assault injury was associated with complex interaction of social and psychological factors. People amenable to distress may benefit from psychological support.

Category – Oral and Maxillofacial Pathology

Abstract No: 0191

Role of tumor microenvironment in disease free survival of oral cancer patients

Dr. Reena Rachel Philips, Dr. B. Sekar

Vinayaka Mission Sankarachariar Dental College and Hospital

Abstract

Background

Oral cancer is the sixth leading cancer by incidence worldwide, the mortality rate of which has not changed significantly over the last five decades, despite advances in technology in diagnosis and management. Treatment failure and loco-regional recurrence are common, and occur in up to 50% of patients and account for the majority of deaths. The high rate of local recurrence proves the long-held notion of condemned mucosa or field cancerization initially described in 1950s. Cancers are complex tissues that contain tumor cells and surrounding stroma which consists of various types of mesenchymal cells and the extracellular matrix. Collectively, this tissue is referred to as tumor microenvironment (TME). This is a retrospective study to understand the role of TME in the prognosis of oral cancer.

Aim

To evaluate the role of TME in oral cancer prognosis.

Methodology

45 oral cancer patients, who were treated at the department of OMFS, VMSDC Salem between 2012 and 2017 were included. The treatment for the patients were planned at the tumor board meeting, which included a maxillofacial surgeon, oncosurgeon, and medical/radiation oncologists. The clinical and histopathological parameters of the patients, along with follow up details were obtained from the records in the department. The immunohistochemical (IHC) reports for tumor markers CYCLIND1, CENPF, Vimentin, VEGF, MMP9, Survivin, EGFR, and Calponin were retrieved from records. The clinicopathological parameters and IHC expression were studied.

Conclusion

The proliferation and anti-apoptosis markers were highly expressed in poorly differentiated and stage 4 diseases, and had poor prognosis.

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Abstract No: 0280

Surgical management of pleomorphic adenoma - a case report

Dr. N. Sriram Choudary

Dhanalakshmi Srinivasan Medical College & Hospital

Abstract

Case report

A 38 year male patient reported with a swelling of the palate, with associated dysphagia and hoarseness of voice. A single right submandibular lymph node (SMLN) was palpable, measuring 0.5 × 1 cm.) Computed Tomography (CT) and Magnetic resonance imaging (MRI) scan revealed a large, heterogeneously enhancing soft tissue density mass in the palate, extending posteriorly up to the oro-pharynx and impeding the tongue inferiorly. Biopsy and FNAC report revealed pleomorphic adenoma of minor salivary gland. The surgery was carried out with the patient categorized under ASA I. Under aseptic precautions, a lip split incision was placed, followed by layered dissection. Right paramedian mandibular access osteotomy was performed, exposing the entire PA. Right hemimaxillectomy of PA was done with tumor in toto along with SMLN removal. Internal fixation of the access osteotomy was done using titanium miniplates. Buccal fat pad was harvested to close the defect in the alveolar region, followed by obturator placement to cover the palatal defect.

Conclusion

Post-operative follow up after 2 months revealed patient phonetics restoration, and no associated dysphagia with satisfactory healing. The PA should be adequately exposed and resected to prevent recurrence.

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Abstract No: 0904

Decompression of cystic lesions of the jaws: a correlation between clinical and biologic behavior with molecular markers expression before and after decompression

Dr. Parimala Sagar, Dr. Kavitha Prasad

M. S. Ramaiah Dental College & Hospital

Abstract

Objectives

To evaluate the response of cystic lesions to decompression by clinical and radiographic assessment at periodic intervals, and to

study the cell and bone regeneration/proliferation associated molecular markers, before and after decompression.

Methods

Source of data patients who have reported or reporting to M S Ramaiah hospitals with age ranging from 8 to 60 years for treatment of gradually enlarging swelling of their jaws, clinically & histopathologically diagnosed as KCOT (keratocystic odontogenic tumors) or UA (unicystic ameloblastoma) were included in the study. paraffin blocks of 35 cystic lesions of the jaws were used for the study. 2 blocks of each case, one before and the other after completion of decompression of the cystic lesion (which is at least 4–18 months apart, depending upon the size reduction). the paraffin blocks of these cases prepared at the time of incisional biopsy and then again at the time of enucleation were obtained. immunohistochemical detection of ki-67, syndecan-1, mmp2, 9, (matrix metalloproteinase no 2& 9) and p27 markers were done in the incisional biopsy block and the enucleation block. clinical behaviors were assessed by periodic clinical & radiographic follow up. a correlation between the clinical and biological behavior was done, to assess the effect of decompression on the tumor tissue.

Results

Clinically there was reduction in the size of the cystic cavity which was confirmed by radiographs. histologically the cystic lining of kcot showed changes towards normal stratified epithelium after decompression, however there was no change in the histology of UA. expression of molecular markers before and after decompression will be presented.

Abstract No: 1076

Hemangiopericytoma, a rare case in paranasal sinus

Dr. Bhavuk Vanza

Gandhi Medical College

Abstract

A case report of hemangiopericytoma arising from fronto-orbitonaso-maxillary complex involving cranial base in female patient of age 40 years. Hemangiopericytomas are unusual vascular tumours that rarely occur in the paranasal sinuses and nasal cavity. They are thought to arise from pericytes that surround capillaries, however, there is no proven etiology of these tumours. Hemangiopericytomas of the nose and paranasal sinuses are thought to behave less aggressively than those occurring in other parts of the body. Lymph node metastasis is rare and elective neck dissection is not indicated. The accepted treatment of these tumours is wide surgical excision. Pre-operative vascular embolization helps to reduce the menace of operative haemorrhage. Hemangiopericytomas can exhibit a high recurrence rate. Therefore, it is mandatory that these patients be followed carefully for the remainder of their lives.

Abstract No: 1138

Unanticipated outcomes in maxillofacial pathologies & trauma surgery- retrospective analysis

Dr. Raja Sekhar Gali

Narayana Dental College & Hospital

Abstract

Objective

To identify and report an institutional experience with a series of cases that had unanticipated outcomes following surgical procedures for oro-facial pathologies and maxillofacial trauma.

Methods

A retrospective clinical case record review was conducted of patients who underwent major surgical procedures under general anesthesia in the maxillofacial surgery unit in a tertiary care teaching hospital over a 15 year period, for pathologies and trauma of the oro facial region. Data were collected on demographics, primary clinical provisional diagnosis, incisional & excisional biopsy reports, medical comorbidities, associated organ injuries (in trauma patients), surgical procedures and operative findings, follow-up reports, adverse events, and final outcome. Cases that fulfilled at least one of the following inclusion criteria were included: a) incisional & excisional biopsy reports did not tally. b)provisional & post operative final diagnosis were mismatched. c) unanticipated outcome (morbidity/mortality) due to a cause unrelated to the primary diagnosis and treatment.

Results

During the period reviewed, 12 patients (7 pathologies and 5 trauma), that satisfied the above criteria were identified. One patient had a recurrent OKC of mandible that presented as a cystic swelling with cheesy aspirate located in temporal fossa. After excision, it proved to be a poorly differentiated squamous cell carcinoma. One patient had a high flow vascular malformation of mandible that precluded an incisional biopsy. Post-mandibulectomy report confirmed it to be a metastatic thyroid carcinoma. Similar aggressive but misguiding pathology cases, and five trauma cases that had an unanticipated, morbid or fatal outcome are presented.

Conclusion

Despite the best possible clinical and diagnostic efforts made pre-operatively, certain aggressive pathologies and conditions in trauma evade the diagnosis leading to unanticipated outcomes.

Abstract No: 0006

Palatal Swellings- An Enigma

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Faculty of Dental Sciences, SRMC & RI

Abstract

Palatal swellings can at times be difficult for a surgeon to diagnose. A swelling of the palate can result from developmental, inflammatory, reactive or a neoplastic process. This paper reviews various common palatal swellings, their clinical presentation, differential diagnosis and management aspects.

Abstract No: 0105
Management of unicystic ameloblastoma in young - a catch 22 situation

Dr. Desai Jimish Bhavikkumar

Air Force Institute of Dental Sciences

Abstract

In retrospect, it is well understood and proven in clinical studies that ameloblastoma is well renowned due to its high recurrence rates on enucleation alone while it has also been well documented with certain treatment options mostly concentrating to wide resections resulting in mandibular defects. Although at this moment, the pinnacle of jaw reconstruction has been well established and continually improving with the advent of vascularized flaps and growth factors, most regions require further development with regards to team protocols, equipment, healthcare coverage, and most importantly experience of microvascular surgeons. Unicystic ameloblastoma is a distinguishable entity of ameloblastomas, characterized by slow growth and being relatively locally aggressive. Three histological types are recognized according to the degree of ameloblastomatous epithelial extension, namely, luminal, intraluminal, and mural types. This classification has a direct bearing on their biological behavior, treatment, and prognosis. However, there is difficulty in determining the most appropriate form of treatment for unicystic ameloblastoma. The author presents his center experience for management of series of unicystic ameloblastomas of mandible in the age group of 12 to 18 years that were managed conservatively with enucleation and chemical cauterization followed by prosthetic rehabilitation. follow up was done for a period ranging up till 36 months with no evidence of clinical and radiological recurrence.

Abstract No: 0134
Mucoepidermoid carcinoma - a rare variant

Dr. Nabeel Nazar, Nivedita Mohan, Ashwin Nehrudhas, Senthilnathan

Saveetha Dental College and Hospitals

Abstract

Mucoepidermoid carcinoma (mec) is considered the most common malignant salivary gland tumor, accounting to about one-third of all salivary malignancies. It arises from the pluripotent cells of the excretory ducts that are capable of differentiating into squamous, columnar, and mucous cells. It occurs mainly in the parotid gland (89.6%), followed by submandibular gland (8.4%). Intraorally it shows a strong predilection for palate. As the name implies, it is characterised by the presence of a mixture of cell types such as mucus secreting, epidermoid and intermediate cells. Clear cells are a rare finding in mecs. Rarely, clear cells may occur in focal areas or may

predominate large areas of the tumor. Though rare, mec occurs in the jaw bone (intraosseous mucoepidermoid carcinoma). Such rare variants of malignant tumors pose great difficulty in diagnosis and management. This is a case report of a rare variant of mucoepidermoid carcinoma - clear cell variant of the maxilla, which was surgically treated by maxillectomy.

Reference

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Abstract No: 0150
Submandibular Gland Excision- Report of 02 Cases

Dr. Major Ashok Kumar, Dr Rahul Kumar

ARMY

Abstract

Submandibular gland is the second largest salivary gland in human body. Each submandibular gland weighs approximately 10–15 g and is anatomically divided to two as superficial and deep parts by posterior part of mylohyoid muscle. Facial vessels, three important nerves including hypoglossal, lingual nerve and marginal mandibular branch of facial nerve proceed in medial part of submandibular gland. Submandibular gland produces 71% of daily saliva and the secretion is composed of serous and mucoid components. Sialolithiasis is the most common salivary disease and the most common cause of salivary gland dysfunction. 80% of salivary stones are seen in submandibular gland and they are most common in the hilus [2–4]. Two cases of salivary gland excision due to sialolithiasis is presented.

Abstract No: 0158
Cementosseous Dysplasia

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Abstract

Fibro-osseous lesion encompass a broad range of conditions, the diagnosis of which can be both challenging and confusing. Cementosseous dysplasia is a specific entity within this group of conditions. Cemento-osseous dysplasia is a benign condition of the jaws that may arise from the fibroblasts of the periodontal ligament. The three clinical presentations are periapical, focal, florid types. This paper highlights case of cementosseous dysplasia focusing on clinical, radiological, histopathological and management aspects.

Abstract No: 0161**Miescher granulomatous macrocheilitis - an uncommon clinicopathological entity: a rare case report**

Dr. Abhilasha Yadav, Dr. Anuj Jain (AIIMS Bhopal) Dr. R. M. Borle (SPDC Wardha)

Awadh Dental College and Hospital

Abstract

Orofacial granulomatosis (ofg) is an uncommon but increasingly recognized disease of unknown etiology. The typical presentation is swelling of the perioral soft tissue, but eyelid edema can be the sole manifestation. Terminology of this disease can be confusing as it may also be referred to as granulomatous cheilitis and a monosymptomatic presentation of Melkersson - Rosenthal syndrome (mrs). Crohn's disease and sarcoidosis should also be considered in the differential as the histopathology can be similar. Corticosteroids are the mainstay of treatment but can lack efficacy. Atypical presentations and the possibility of systemic disease involvement can further challenge the management. We describe an unusual case in which ofg manifests solely as upper lip swelling. This 28-year old male patient had a delayed diagnosis that responded well to systemic and intralesional corticosteroid injection. In addition to describing this unusual presentation of ofg, we review the relevant literature and evaluate the current terminology used to describe this entity.

Keywords cheilitis granulomatosa, melkersson rosenthal syndrome (mrs), orofacial granulomatosis

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Abstract No: 0196**Post surgical assessment of quality of life in patients treated for ameloblastoma**

Dr. Balamanikandasrinivasan C

Vinayaka Mission Sankaracharyar Dental College

Abstract

Background surgical resection of jaw bones affected by ameloblastoma cause asymmetry, facial disharmony, and tooth loss which compromises function and esthetics. Therefore post-surgical assessment on quality of life (qol) becomes important. Assessment of the qol provides details about the psychosocial well-being of patients and is an important tool for evaluating outcomes in concurrence with mortality, morbidity and recurrence rates. It reflects the patients' appraisal and satisfaction with their current level of functioning compared with their perceived or expected outcomes. Aims and objectives to assess the quality of life (qol) of patients who underwent

surgical management for ameloblastoma through a questionnaire materials and methods patients who underwent surgery for ameloblastoma in the last 5 years were recalled. They were given a questionnaire (based on University of Washington qol questionnaire-[uw-qol]) and their responses were recorded. The uw-qol was modified according to our need for its use in benign jaw tumor. Questions were explained in the native language to the patients and the various parameters were scored as per their opinion. To avoid bias the operating surgeon was not involved in the methodology. Results scoring obtained from the patient were compiled and evaluated. Their responses of patients were co-related with the site, size of the defect and duration of follow up. Conclusion therapeutic success in a surgeon's perspective is often seen in terms of recurrence and survival. Whereas in patients point of view it doesn't stop only with recurrence and survival but also expects to return to his lifestyle to the predisease state. Qol studies help the surgeon to bridge this gap. Therefore this study was conducted to fulfill above mentioned gap between us (surgeons) and our patients.

Abstract No: 0197**Fibrous dysplasia of craniomaxillofacial skeleton - an experience**

Dr. Chandresh Jaiswara

Faculty of Dental Science SIMS BHU Varanasi

Abstract**Background**

Fibrous dysplasia is an uncommon bone disorder. In this disease fibrous tissue develops in place of normal bone. This can weaken the affected bone and can lead to bony deformity or even fracture. This may affect single or multiple bone. Case presented here is a unique case leading to deformity of left half of the face and cranium. The nerves to eyes and ears may be surrounded by affected bone. Severe deformity of facial bones can lead to loss of vision and hearing.

Research Aims/Objectives

Fibrous dysplasia mostly don't have symptoms and are diagnosed when an x-ray taken for another reason reveals signs of fibrous dysplasia. This requires early diagnosis and treatment to prevent permanent bony damage or deformity.

Methods

The presented case here is a 12 years old child with left sided facial deformity and cranial bone enlargement. The patient is having deformity of unilateral facial and cranial bones in computed tomography with ground glass appearance with obliteration of maxillary sinus on the affected side. The patient was done cranial and facial bone recontouring and tissue collection for histo-pathological examination.

Results/Findings

The surgical re-contouring of bone was done to archive better facial aesthetics, tissue collected for histo-pathological examination and to prevent nerve compression. Bisphosphonate therapy was started to prevent further spread of the lesion. Conclusion regular follow up is needed in the patients suffering from fibrous dysplasia of bone.

Abstract No: 0235**Ameloblastoma of anterior maxilla - a case report***Dr. Hemavathy O. R**Saveetha Dental College***Abstract**

Ameloblastoma of anterior maxilla - a case report ameloblastoma is a benign odontogenic tumor generally present in the jaw bone. The tumor originates from the residual epithelium of the tooth germ, epithelium of odontogenic cysts stratified squamous epithelium and epithelium of the enamel organ. It represents approximately 1% of oral tumors. It occurs more in mandible than maxilla. Ameloblastoma clinically appears as an aggressive odontogenic tumor, often asymptomatic and slow-growing, with no evidence of swelling. Peripheral ameloblastoma (pa) is the rarest variant of ameloblastoma. It differs from the other subtypes of ameloblastoma in its localization it arises in the soft tissues of the oral cavity around the tooth bearing bones. Generally, it manifests a nonaggressive behaviour and it can be treated with complete removal by local conservative excision. We report a case of ameloblastoma of anterior maxilla in a 47 year old female patient who presented with a painless palatal swelling in right canine region since 8 years, measuring around 1.5×1.5 without surface ulceration the lesion was excised completely and allowed for secondary healing. According to the clinical, radiographic, and histopathological examination, a peripheral ameloblastoma or extra-osseous ameloblastoma was diagnosed

Abstract No: 0263**The recurrent rearrangements in some salivary gland carcinoma***Mr. Miyabe, Kenichiro Ishibashi Toru Nagao**Dept. of Maxillofacial Surgery, Aichi Gakuin Univ***Abstract**

The salivary gland tumors are heterogeneous and diverse with variable prognosis, limitations of histopathology in the identification of patients with questionable diagnosis and aggressive disease can be overcome by developing a reliable biomarker. These biomarkers are futuristic in the development of targeted therapy. The recent research in molecular biology of salivary gland tumors identified fusion of specific genes in certain tumors, for example; the myb-nf1b fusion are specific to adenoid cystic carcinoma, the crtc1/3-maml2 fusion to mucoepidermoid carcinoma, the etv6-ntkr3 fusion to secretory carcinoma, and so on. Moreover the identification of these specific fusion oncogenes lead to the recognition of new entities and reclassification of salivary gland tumors. However there has been some debate as to whether a subset of warthin tumor harbor the crtc1/3-maml2 fusion, we recently proposed that a subset of warthin tumor with crtc1/3-maml2 fusion gene should be considered as a new variant of mucoepidermoid carcinoma. Further, in secretory carcinoma, an unknown (non-ntkr) genes appeared to fuse with etv6 (etv6-x fusion) and the masc possessing etv6-x fusion might show an invasive histology. In addition, recently a new rearrangements have been reported for polymorphous adenocarcinoma (pa, used to call plga), which is regarded as a trash box on pathological diagnosis of salivary gland carcinoma. We report new knowledge about this translocation in our pa cases.

Abstract No: 0270**Facial nerve monitoring an inescapable tool for beginners in parotid surgeries***Military Dental Centre Bareilly**Dr. Rajashekhar D Gadad***Abstract****Introduction**

Facial nerve injury is a feared complication of parotidectomy. Facial nerve paralysis can cause cosmetic and functional morbidity, ocular complications, diminished quality of life, and medical malpractice litigation. Facial nerve monitoring is an adjunctive method available to a surgeon during parotid surgery to assist with the functional preservation of the facial nerve. A diagnosed case of pleomorphic adenoma left parotid gland was operated for superficial parotidectomy with the help of electric nerve simulator with no motor loss of facial nerve function.

Objective

To preserve the facial nerve and all its branches with no or minimal motor deficit post surgery and monitoring the facial nerve function of all its branches during surgery to enable in safe dissection.

Methods

Electric nerve stimulator used intraoperatively after elevation of skin flap and facial nerve branches identified and dissection carried out proximally towards the nerve trunk and to identify and check the function of each of the branches during the surgery.

Conclusion

Damage to facial nerve during parotidectomy can be devastating for the patient and can demoralize the surgeon before attempting such surgeries so its pertinent that use of nerve stimulator during the surgery can be an inescapable tool to beginners in attempting such complicated surgeries.

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Abstract No: 0291**Unusual case presentations***Dr. Panicker Prashanth, Dr. Ashford Lidiya Georeg, Dr. Archana Shenoy, Dr. Arjun Gopinath**Kannur Dental College***Abstract**

Correct diagnosis of a lesion or condition is of utmost importance for proper treatment planning and its appropriate management. Numerous conditions affect the head and neck region and may have multiple ways of presentation. It should be kept in mind that diagnosis solely based on clinical presentation or imaging may not always suffice, even though they may aid in differential diagnosis and narrowing down the possibilities most of the time. A purely clinically based

diagnosis alone might lead us in a wrong direction. Thus a systematic approach including clinical diagnosis, radiographic aids, histopathological analysis and the use of other advanced diagnostic modalities as and when required is necessary for accurately diagnosing and appropriately managing them. Presented here are four cases with unusual presentations reported to our institution, our aim being to stress on the importance of following a proper step by step protocol for accurate differential diagnosis by following a systematic approach and thus aid in their appropriate management.

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Abstract No: 0372

Odontogenic keratocyst: an experience with conservative surgical management

Dr. Nagarajappa. D

SJM Dental College and Hospital, Chitradurga

Abstract

The odontogenic keratocyst (okc) is a developmental cyst, which is worthy of special consideration. It possesses typical clinical as well as histopathological features; however it's overly aggressive behavior and also a high chance of recurrence requires special attention especially in regard to surgical treatment planning. The aim of this presentation is to share our experience with conservative surgical management of okcs over a 9-year period. Okc is also one of the major components of nevoid basal cell carcinoma syndrome (nbccs), which usually occurs in young ages and involves significant structures of the jaws. Due to a high recurrence rate of okcs, there are many controversies in treatment of the lesion, especially in syndromic cases amongst younger individuals. In this current account, we have used a conservative protocol in the treatment of okc in a patient with nbccs type features with success. Additionally, the use of carnoy's solution with enucleation has its own advantage. In our 9-year experience, we concluded that a successful treatment method was complete precise enucleation and peripheral osteotomy along with the use of carnoy's solution. The systematic and long-term post-surgical follow-up is also a key element for successful results in the management of okcs.

References

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Abstract No: 0442

Tuberculosis in the maxillofacial region: rare presentation of a common disease

Dr. Geetha N T, Dr. Kirthikumar Rai

Bapuji Dental College and Hospital, Davangere, Karnataka

Abstract

One-third of the world's population is affected by tuberculosis. Primary infection is usually in the lungs with secondary infection spreading to the other organs and tissues. Tuberculosis of maxillofacial region is a rare manifestation of extrapulmonary tuberculosis accounting for 10% of all cases. Extrapulmonary sites of infection commonly include lymphnodes, pleura, osteoarticular areas although any organ can be involved. Extrapulmonary tb (eptb) involving the maxillofacial region as a primary lesion is very rare and can involve tissues, such as the lips, tongue, buccal mucosa, gingiva, palate, salivary glands, lymph nodes, and jaw bones. These infections generally involve the head and neck through hematogenous or lymphatic routes. These cases pose a diagnostic challenge because of their nonspecific presentation which might delay their diagnosis and thereby creating problems in definitive treatment as well. An early diagnosis and proper treatment of these lesions can avoid complications and potential contaminations. In this paper we would like to share two cases of extrapulmonary tuberculosis reported and got treated in our department. One case is of tuberculosis involving the submasseteric region and other involving the temporomandibular region. We would like to emphasize on the investigations and diagnosis of these lesions so that we can reduce the surgical morbidity by managing them in a right way.

Abstract No: 0459

Osteomyelitis of Jaws - Management

Dr. Saravanan Kandasamy

Vinayaka Missions Sankaracharya Dental College

Abstract

Osteomyelitis is inflammation of the bone that is usually due to infection. The infection may occur due to hematogenous spread of an organism, direct inoculation of an organism through trauma, or contiguous spread from a soft tissue infection. The prevalence of osteomyelitis has been increasing secondary to factors such as history of trauma, geographic location, immune status, and the age of the patient. Patients with osteomyelitis may present with a variety of symptoms including nonspecific constitutional symptoms, such as dental origin with pus discharge, chills, fevers, fatigue, irritability, lethargy, or malaise. It is difficult to treat, often requiring both medical and surgical interventions. High clinical suspicion is the key to early diagnosis, and identification of the pathogen is crucial for management. Diagnosis should be made with a combination of physical examination, imaging studies, and laboratory studies, but the gold standard includes culture and histopathology of the infected bone. Treatment should be guided by cultures obtained from bone and usually requires long-term antibiotics followed by surgical intervention. My paper presentation will highlight the need for multimodal treatment especially for the management of fungal osteomyelitis.

Abstract No: 0509**THE 3R'S – resection, reconstruction and rehabilitation of ameloblastoma - report of two cases***Prof. Deepak Agrawal**College of Dentistry, Indore***Abstract**

Ameloblastoma being benign is locally aggressive tumour of oral cavity. Resection remains the best treatment modality though still controversial. Restoring the patient's appearance and function is the key to successful treatment post resection. Osseo-integrated implants in reconstructed bone helps in restoring the masticatory function to normal. This study describes complete early successful rehab of two cases of mandibular ameloblastoma with en-bloc resection, reconstruction with non-vascularised iliac bone graft and rehabilitation with osseointegrated dental implants.

Abstract No: 0588**Unilocular radiolucencies of the jaw case series***Dr. Mamatha. N. S.**Rajarajeswari Dental College and Hospital***Abstract**

Unilocular radiolucent lesions occur in both jaws. There are various odontogenic and nonodontogenic lesions like cysts and tumors presenting with unilocular radiolucency. There are normal anatomic structures appearing as unilocular radiolucency. Some of the lesions present at a typical site with a classic radiographic feature and few of the lesions exhibit varied radiographic features. This paper presents various unilocular lesions of the jaws with management and discusses the differential diagnosis of the unilocular radiolucent lesions of the jaws.

Abstract No: 0628**Is Marsupialization effective for aggressive cysts of jaws?***Dr. Jaeson Mohanan Painatt, Dr. Ravi Veeraraghavan, Dr. Ushass Puthalath, Dr. Shyamsunder, Dr. Girisankar**Amrita Institute of Medical Sciences***Abstract****Introduction**

Keratocystic odontogenic tumour (kcot) and unicystic ameloblastomas (ua) are the commonly seen aggressive cysts of the jaws. Although removal of these cysts is necessary, surgical enucleation can result in fracture or nerve injury if the cyst is large. To avoid these complications, marsupialization is recommended for reducing the size of the cyst hence making it safe to enucleate. Kcot and ua, with its cyst like character, is considered to be a good indication for

marsupialization. However, there are only few studies that have focused on post-operative success based on the size of all types of ua and kcot following marsupialization.

Objective

To evaluate the clinical effectiveness of marsupialization for kcot and ua using cone beam computed tomogram (CBCT). Methods with the aid of cbct, the size of the cysts before and after marsupialization were measured. The duration of treatment and the shrinkage percentage were investigated. Results of the cbct of 12 kcot and 10 ua were analyzed. These aggressive cysts responded successfully to marsupialization except for the type iii unicystic ameloblastoma. Type III ua did not respond to the treatment adequately. However, there was a significant reduction in size of kcot and other types of ua.

Conclusion

Good results can be achieved by marsupialization in a modern era of aggressive surgical procedures and reconstructive techniques.

Abstract No: 0760**Incidence of coronoid hyperplasia in decreased mouth opening***Dr. Amit Bhandari, Dr NK Sahoo, Command Dental Centre Lucknow**Dept of Dental Research and Implantology***Abstract****Purpose**

Ankylosis and oral submucous fibrosis (osmf) are the most common conditions associated with decreased mouth opening. In both the conditions elongation of coronoid is a common radiological feature. The exact mechanism for this appreciable elongation of coronoid process is not known till date. Present literature advocate coronoidectomy as a standard procedure in conjunction with osteoarthrectomy for ankylosis cases and transection of fibrous bands with coronoidectomy in the management of osmf.

Material and method

We have retrospectively analyzed orthopantomograph (opg) of all the cases of ankylosis and OSMF reported to our institute beginning 2005 till 2014. Group a consisted of ankylosis cases where as group b consisted of osmf cases of all grades. All the cases were then related with the preoperative records including the history of each case. Suitable statistical analyses were used to compute the relationship.

Results

Coronoid elongation was found to be statistically significant in the cases where the history of trismus was long and the extent of trismus was more.

Conclusion

Coronoid elongation should be anticipated and considered in comprehensive management in all the ankylosis and osmf cases where the extent and duration of trismus is more.

Abstract No: 0837
Surgical Approach to a Massive Ossifying Fibroma of Midface

Prof. Harsh Jain

ITS Dental College

Abstract

The term ‘‘ossifying fibroma’’ has been used since 1927, which is a benign fibrous lesion that can arise anywhere within the facial skeleton and skull. Over 70% of the cases arising in the head and neck region involve the mandible and maxilla, with only sporadic cases reported in the nasal cavity, paranasal sinuses, and skull base. The origin of it is thought to be the periodontal membrane. Some of them do, in fact, contain prevalent cementum-like calcifications and others show only bony material, but a mixture of the two types of calcification is commonly seen in a single lesion. It can occur at any age; however, many authors confirmed that of the jaw tended to occur in middle-aged patients. Of the jaw bone shows a predilection for females. We hereby report a case of with breathing, swallowing and visual impairment. Keeping in mind patient’s age and esthetics we decided to do a facial partition flap including rhinotomy, mandibulotomy to deliver the lesion in toto. With the help of Stereolithography (STL) model osteotomy cuts were planned and the hardware used was also present. Patient recovered uneventfully also minimal changes in facial esthetics with improvement in breathing, swallowing and visual acuity.

Abstract No: 1033
Efficacy of intralesional placental extract, dexamethasone and hyaluronidase in osmf

Dr. Tanvi Vijay, Dr. Priyanka Singh

Pacific Dental College and Hospital

Abstract

Background

Oral submucous fibrosis is a well recognized chronic insidious disease, precancerous condition, autoimmune and collagen related disorder which is multifactorial in origin mainly associated with the practice of chewing betel quid containing areca nut, a habit common among lower socio-economic strata of society. Its medical management is still a matter of debate and no definite protocol is standardized yet to achieve miraculous result. Intralesional injection of drugs like dexamethasone, placental extract and triamcinolone helps to increase the mouth opening by breaking the fibrous bands.

Method

This study compares the efficacy of intralesional placental extract, dexamethasone and triamcinolone acetonide in clinically diagnosed osmf patients divided into three groups of 10 patients each. Group a received 2 ml intralesional placental extract (placentrax) mixed with 2 ml of 2% lignocaine hcl, group b were given intralesional injection of dexamethasone 1.5 ml mixed with 2 ml of 2% lignocaine hcl and group c patients were administered intralesional hyaluronidase 1500 iu mixed with 2 ml of 2% lignocaine hcl weekly for 8 weeks. Mouth opening and burning sensation was recorded clinically and subjectively.

Result

Data were compared and result were tabulated. Improvement in mouth opening was observed the maximum with intralesional injection of hyaluronidase followed by placental extract and then dexamethasone. Improvement in burning sensation was observed maximum with intralesional injection of dexamethasone followed by placental extract and comparatively less improvement was seen with hyaluronidase.

Conclusion

Intralesional injection of hyaluronidase is comparatively better than intralesional placental extract administration followed by intralesional dexamethasone. Burning sensation reduces with all intralesional injections but comparatively less with hyaluronidase.

Abstract No: 1049
Lasers for tobacco abuse induced oral leukoplakia

Dr. Group Captain Srihari Krishna Kaushik

Air Force Dental Centre

Abstract

Aim

Determine the efficacy of laser in the management of oral leukoplakia and to evaluate clinically and histopathologically the disease course with six monthly follow up. Material methods: the study involves screening of all patients and selecting those who have white lesion in the buccal mucosa with positive history of oral tobacco abuse. Along with the routine case history, a comprehensive record of the habit history including form, frequency, chronicity, length of contact of tobacco, etc. as well as clinical details of the lesion as to site, size, color, consistency, texture, tenderness, etc. are recorded. Thirty cases of clinically diagnosed cases of oral leukoplakia in the buccal mucosa confirmed by histopathology will be selected for inclusion in the study and treated by laser. The cases will be reviewed after 1 day, 1 week, 1 month and 6 months. The clinical subjective signs will be noted for improvement/deterioration or status quo as well as objectively of the dimensions of the lesion, color, consistency, texture etc. followed by repeat biopsy after 6 months. The outcomes after the clinical and histopathologic determinants will be processed with standard statistical tests, the results will be derived and findings concluded. Oral leukoplakia is a common precancerous lesion of the oral mucosa defined as a white patch or plaque that cannot be characterized clinically or pathologically as any other disease. There are different kinds of treatment for this lesion including scalpel excision, electrocautery, cryosurgery, laser surgery and medications. High power laser has some advantages like less pain, swelling, prevention of metastasis, edema, less bleeding (dry surgery) and infection. There is no data of prospective study for the outcomes after laser application in the management of oral leukoplakia, both by clinical and histopathological follow up in current literature.

Abstract No: TR1911
Minimal invasive management of unusually large dermoid cyst centrally present in the floor of the mouth - a case report

Prof. Mahesh Kumar Goel

PGIDS, Rohtak, Haryana

Abstract

Background

Dermoid cysts are infrequently found in the head and neck region with the most common location being the external third of the eyebrow. Cysts on the floor of the mouth are rare and a case of unusually large dermoid cyst, centrally present in the floor of mouth was managed with minimal invasive intervention.

Materials and Methods

A 18-year woman presented with a swelling in the floor of mouth and sub-mental region with disfigurement that had been steadily increasing in size over the past few years. Patient suffered difficulty in mastication and swallowing during the past year. Intraorally, a dome shaped swelling appeared in the floor of mouth on raising the tongue and Magnetic resonance imaging (MRI) imaging revealed a large, well defined (craniocaudally oval) cystic lesion in floor of the mouth which was enucleated intraorally in toto.

Discussion

Dermoid cysts are the non odontogenic cysts which may be congenital or acquired. According to Meyer, dermoid cysts are the benign tumours derived from entrapment of epithelial debris during embryogenesis. The acquired forms are mainly due to trauma, iatrogenic or as a result of occlusion of a sebaceous gland duct. They mainly occur in second or third decade of life. Dermoid cysts of floor of mouth contribute 1.6–6.5% of all body dermoid cysts.

Conclusion

Dermoid cysts in the floor of the mouth are infrequently seen and are usually asymptomatic with a slow and progressive growth pattern. The early diagnosis and prompt intervention can result in uneventful healing.

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Abstract No: TR5129
Unconventional access to massive ossifying fibroma of maxilla

Dr. Manish Jagdish Raghani

All India Institute of Medical Sciences (AIIMS)

Abstract

Background

Ossifying fibromas are slow growing benign neoplasms most commonly found in the jaws. These are painless tumours and can attain enormous size and leads to significant facial deformity if left untreated. Generally found in 3rd and 4th decades of life and with

female predilection. Management consists of curettage or enucleation or resection of the lesion depending on the stage and extent.

Clinical case

A 50 years old male patient reported to our institute with a slow growing painless swelling and expansion of right maxilla. The CT findings suggested the growth is enormous extending and eroding up to the skull base. The MRI findings suggested dura was not involved in the tumour, although the skull base bone was eroded. We describe the surgical access to the remove this large deep seated tumour and its post operative outcomes.

Conclusions

The surgical access to remove these huge tumours should be carefully planned, so that the tumour should be removed completely without left overs and should facilitate complete post operative rehabilitation.

Category – Orthognathic and Aesthetic Surgery

Abstract No: 0157

Soft and hard tissue changes in skeletal class iii

Dr. Anju Gopinath T., Dr. B. Rajendra Prasad, Dr. Vikram Shetty

P.S.M. Dental College, Akkikkavu

Abstract

Background and objectives

To assess the skeletal changes and soft tissue responses of skeletal class III patients treated by bimaxillary orthognathic surgery and to evaluate the correlation between soft and hard tissue changes.

Methods

The sample consisted of 15 skeletal class III patients (mean age 24 years), treated with Bilateral Sagittal Split Osteotomy and Le -Fort I advancement. Lateral cephalograms were taken immediately before, and 6 months after bimaxillary surgery. Paired t-test and Pearson correlation test were used.

Results

Maxillary advancement combined with mandibular setback surgery corrected the facial concavity, and resulted in the improvement of horizontal and vertical positions. The most significant differences in skeletal variables were observed in SNA ($p = 0.011$), ANB ($p < .001$) and N-PG ($p < .001$). The differences in dental measurements were seen in overjet ($p < .001$), overbite ($p = 0.01$). Significant differences in soft tissue variables were found in lower lip protrusion ($p < .001$), B-Pg distance ($p = 0.001$), SI-B ($p = 0.027$), LS-U1 ($p = 0.038$), LI-L1 ($p = 0.03$). The ratio of SN-A to N-A was found to be 2.48:1, SI-B to N-B was 0.10:1. Nasolabial angle to SNA angle ratio was found to be 0.89:1. When the ratios were evaluated as a whole, the soft tissues were affected less in the nasal area and the soft tissue improvement increased gradually as we moved to the labiomental and chin areas.

Conclusion

Maxillary and mandibular soft and hard tissue movements showed significant correlations in horizontal and vertical directions, 6 months after bimaxillary surgery.

Abstract No: 0232
Comparative Evaluation of Use of Saw Versus Bur in Le Forte I Osteotomy

Dr. Shilpa Bawane, Dr. Pushkar Waknis

Dr. D Y PATIL Dental College PIMPRI Pune

Abstract

Objective

The objective of the study was to evaluate and compare the use of saw and bur in Le fort I osteotomy.

Methods

The study was a comparative study. Total six patients with vertical maxillary excess were included. Patients were selected for Le Fort I osteotomy alternatively with bur and saw. In Group I, Le Fort I osteotomy cut was made with saw. In Group II, osteotomy cut was made with bur. Time required for osteotomy from start of bone cut to the completion was recorded. Maxilla was down fractured, and superior repositioning was done. Primary study outcome was the time required for osteotomy made with saw and bur.

Results

In each group, 3 patients were included. In Group I, average time required from start of osteotomy to completion was 4 min while in group II, it was 9 min. Osteotomy cut made with saw required less time and the cut was more precise compared to bur. In osteotomy cut made with bur, cut was not precise, and extra bone was removed apart from planned osteotomy cut. Due to this, superior repositioning of maxilla was easy compared to saw.

Conclusion

The use of saw for osteotomy cut required less time and bone cut was more precise than bur. Author concluded that for traditional Le Fort I osteotomy for advancement, use of saw would be better option, while combination of saw and bur, that is, use of saw for inferior osteotomy and bur for superior cut, would be more advantageous than saw alone.

Abstract No: 0410
Surgery first orthognathic approach

Dr. Sam Raj G

Scudder Memorial Hospital

Abstract

Surgery first orthognathic approach (SFOA) has been gaining popularity in recent years due to its various advantages like the reduced treatment time owing to the regional acceleratory phenomenon (RAP), reduced cost and the improved patient satisfaction and compliance. Though there is no presurgical orthodontics involved, the orthodontists play a major role in planning the case to achieve a treatable malocclusion following orthognathic surgery, after which they will eventually manage to complete the finer details of occlusion. The SFOA relies on osteotomies to solve most of the skeletal and dental problems, and to provide a treatable malocclusion and sim-

plifying the post operative orthodontic treatment. The surgery first approach has been primarily introduced to overcome the shortcomings of conventional orthognathic surgery like increased treatment time, and worsened facial deformity during decompensation, thereby improving the patients' compliance and cooperation to complete the treatment comprehensively.

Abstract No: 0718
Does extraction time of third molar influence Bilateral Sagittal Split Osteotomy (BSSO) outcomes?

Dr. Madhulaxmi M, Dr. Abdul Wahab PU, Dr. Nobin Mathew, Dr. Senthil Nathan P, Dr. Pradeep D, Dr. Abhinav RP, Dr. Muthusekar MR

Saveetha Dental College

Abstract

Background

Complications following Bilateral Sagittal Split Osteotomy (BSSO) has an adverse impact on treatment outcome and patient satisfaction.

Aim and Objectives

To evaluate the incidence of bad splits and rate of postoperative wound infection in patients undergoing Bilateral Sagittal Split Osteotomy with relevance to preoperative and intraoperative removal of lower third molar.

Methods

A prospective randomized controlled split mouth study was done on 18 patients. Patients were divided into two groups, Group I included 18 sides, which was 3 months preoperative removal of lower third molar and group II included 18 sides, which was intraoperative removal of lower third molar. Intraoperative incidence of bad splits was checked. Postoperative follow up for wound infection was done for 3 months. Postoperative infections were evaluated with reference to the criteria for defining a surgical site infection.

Results

There was no incidence of bad splits in both groups. One patient in Group I and two patients in Group II required rescue antibiotics. One patient in Group II required plate removal after 3 months. Edema, erythema and pain were statistically significant in the immediate postoperative period in Group 1 and Group 2. There was no statistical significant difference in post operative wound infection between the groups.

Conclusion

The overall rate of infection in this study was 12%, within the expected range for a clean-contaminated procedure¹. Removal of mandibular third molar, either preoperatively or intraoperatively in patients undergoing BSSO has no statistical significance while comparing incidence of bad splits and the rate of postoperative surgical site wound infection.

Reference

- Peterson IJ (1990) Antibiotic prophylaxis against wound infections in oral and maxillofacial surgery. *J Oral Maxillofac Surg* 48(6):617–20.

Abstract No: 0767
Orthognathic surgical outcome - patients perspective

Dr. Vikram A

Kanachur Institute of Medical Sciences

Abstract

Background

The surgical outcome after orthognathic surgery is evaluated by the surgeon based on the observation and cephalometrics. The patient's satisfaction, their peers, functional ability after the surgery and acceptance of the patient socially should also be considered in the overall evaluation of end result.

Aim

To evaluate the surgical outcome from the patient's perspective.

Methods

A prospective study based on 60 patients who underwent various orthognathic procedures. All patients had esthetics as the primary concern out of which 21 patients in addition, had functional disturbances. Patients were assessed pre and 1 year post operatively using questionnaire and clinical evaluation. The functional evaluation was done using Anamnestic and Clinical Dysfunction Indices and the psychological evaluation done by Quality Of Life Index (QOLI) and Post Surgical Patient Satisfaction Index (PSPSQ).

Results

The statistical analysis shows significant improvement in quality of life.

Abstract No: 0893
Open Rihnoplasty “Scenarios and Approaches”

Dr. Susmitha Rajmohan

Sri Aurbindo College of Dentistry

Abstract

As one of the most prominent facial features, the nose has a distinct anatomic presence, that renders it uniquely susceptible to scrutiny and injury. Rhinoplasty is one of the most difficult of all cosmetic facial surgery procedures, and offers a dramatic enhancement to the entire face as it corrects not only nasal structure, but also the overall symmetry of the face without compromising nasal function. As a procedure, rhinoplasty has a rich historical background with early descriptions of forehead reconstruction thousands of years ago. Today rhinoplasty is a nuanced restorative and artistic procedure, which is undertaken for health as well as aesthetic reasons. In modern rhinoplasty, a combination of different approaches or multi-stage surgeries is performed to achieve the desired functional and esthetic results. There is an ever-growing need to alter and modify standard techniques to achieve surgical goals and satisfy the ever increasing patient expectations. This presentation would show case a series of non-cleft aesthetic open rhinoplasty procedures, and selection of grafts for nasal deformities, including a rare kind of alar deformity correction.

Abstract No: 0974
Zygomatoco-maxillary ‘lateral-swing’ osteotomy for augmentation of midface deficiency

Dr. Thomas Zachariah, Dr. RS Neelakandan, Dr. Aparna Murugan

Meenakshi Ammal Dental College and General Hospital, Chennai

Abstract

Background

Various surgical modalities have been proposed for the augmentation of midface deficiency, without correction of the occlusal component. They include autogenous bone and cartilage grafts, alloplastic materials and osteotomies. We propose an innovative osteotomy technique for augmentation of the midface including the infra-orbital rims, zygoma, anterior maxillae, and the paranasal areas, without advancing the dental-bearing segment.

Objectives

To evaluate the effectiveness a new midface osteotomy technique to augment midface deficiency, not involving the dental component.

Methods

This procedure was carried out on a 21-year-old male patient who had deficiency of the anterior maxillae including the infra-orbital rims. His occlusion was in Class I molar relation. The surgical exposure was carried out via a midface degloving approach. The osteotomy line started at the infraorbital rim lateral to the lacrimal fossa, running across to the root of frontal process of zygomatic bone, zygomaticomaxillary suture behind the zygomatic bone, zygomatic buttress, anterior surface of the maxilla above apices of the maxillary teeth, paramedial to the piriform fossa to finally join the infraorbital cut superiorly. A greenstick fracture at the zygomatic arch pedicled the osteotomized segment to the zygomatic process of the temporal bone. The entire segment was swung laterally outwards, effectively separating the zygomaticomaxillary suture posteriorly. Fixation was achieved with a single 2-mm l-shaped, 4-hole plate with gap at the zygomatic buttress region.

Results

This osteotomy technique resulted in fullness of the anterior maxillae and infraorbital rims, with increased anterior and lateral projection of the zygoma.

Conclusion

The zygomaticomaxillary lateral swing osteotomy is a reliable and stable technique for total midface augmentation, not requiring occlusion correction.

Abstract No: 0988
Mandibular setback and its effects on speech

Dr. Vishal Kulkarni, Dr. Maj Gen NK Sahoo, Dr. Brig ID Roy

Indian Army

Abstract

Objectives

To study effects of mandibular set back by BSSRO on phonetic quality of vowel sounds and compare it with preoperative recording.

Methods

Ten non syndromic male patients of mandibular skeletal excess, between 16 to 24 years of age undergoing pre-surgical orthodontic

treatment, were included in the study. Before surgery, vowel sounds in hindi language were recorded by suitable software. The patients were treated by Bilateral Sagittal Split Ramus Osteotomy for mandibular setback. Postoperatively, same sets of sounds were recorded at an interval of 4, 8, 12, 24 and 52 weeks. The acoustic features were divided into two groups: f1 being vowel sounds of posterior region (oropharyngeal) and f2 being vowel sounds produced in the anterior region. The data analysis was done using PRAAT software (ver 5404).

Results

A total of 10 male patients were selected with an average age of 17.4 years. Amount of mandibular setback on an average was 6 millimetres. It was observed that frequency values of f1 reduced after the surgery till 12 weeks, following which it improved to its preoperative status. F2 values increased postoperatively and continued to be higher than the preoperative values throughout the follow up period.

Conclusion

Mandibular set back by Bilateral Sagittal Split Osteotomy have profound influence on the acoustic qualities of the subjects. In our study it was realized that, such changes are attributable to changes in transverse and vertical changes of the oro-pharyngeal and oral apertures respectively.

Abstract No: 1034

Assessment of “surgical lip repositioning” as treatment for smile enhancement

Dr. Aseem Sharma

AIIMS Bhopal

Abstract

Background

‘Everything has beauty, but not everyone sees it!’-Confucius. A patient’s smile can express a sense of joy, success, sensuality, affection, courtesy and confidence. When an excess of gingiva superior to the maxillary anterior teeth is displayed upon full smile, it is termed a gingival or gummy smile. Short and hyperactive upper lip may translate 1.5 – 2 times the normal distance from repose to full smile, producing a gummy smile. Lip repositioning surgery (LRS) is one of the simple, cost effective and less invasive techniques being carried out under local anaesthesia, which can provide promising results to the patients with gummy smile.

Aim and Objectives

To assess the efficacy of lip repositioning surgery in cases of short upper lip and hyperactive upper lip leading to excessive gingival display, to minimize the gingival display, and to achieve more desirable fuller upper lip.

Methods

Seven patients, aged 18–30 years, in a period of 2 years with the chief complaint of a “gummy smile” were taken up as the cases for LRS. This was accomplished by removing a strip of mucosa from the maxillary buccal vestibule and creating a partial-thickness flap between the mucogingival junction and the upper lip musculature. The lip mucosa is then sutured to the mucogingival line, resulting in a narrower vestibule and restricted muscle pull, thereby reducing gingival display during smiling. Patients were evaluated for: upper lip length, upper lip thickness, gingival display on posed smile, post operative complications, and patient satisfaction at 1 week, 1 month and 3 months postoperatively.

Conclusion

With LRS, gingival display reduced greatly. Also the esthetics of the upper lip were enhanced. There was increase in the upper lip length, thickness and volume, producing a more desirable and fuller upper lip.

Abstract No: 1050

Sagittal Genioplasty: New Techniques

Dr. Sharana Basappa Japatti, Dr. Namrata Chourasia

ACPM Dental College

Abstract

Although often looked at by surgeons as a secondary procedure after orthognathic surgery or rhinoplasty, chin configuration is an important component of facial aesthetics. When it is appropriate in size, shape, and position, the chin can enhance the normal harmony and symmetry of the face, even camouflaging less than ideal jaw relationships. However, when inappropriate, it can significantly detract from an otherwise pleasant face or surgical result, and convey unwanted and undesirable attributes. Failure to perform a needed genioplasty can jeopardize the end product of many hours of otherwise successful major orthognathic or cosmetic surgery. The chin is a reflection of the entire face and, along with the nose, is one of the major determinants of facial profile balance. When too long in the vertical or horizontal planes, the chin can convey, be it desirable or undesirable, masculinity and strength. When deficient, it can convey weakness and femininity. Although admittedly a relatively minor surgical procedure, no wise surgeon minimizes the effect of the chin on facial proportion. With all the older techniques, difficulties can be experienced with step deformity, less bone contact and problems of fixation and stability of the mobilized bone fragments and callus formation producing an unpredictable contour. So we have proposed two new methods of genioplasty on the dry mandible, to subside the disadvantages of older techniques.

Abstract No: 1080

Hair restoration by follicular unit extraction & its efficacy

Dr. Kiran Savant, Dr. Rakshith Khandeparker

Chief Consultant, Maxillofacial & Hair Transplant Surgeon at Rejoice Aesthetics Bangalore

Abstract

Background

Alopecia of the maxillofacial region be it the scalp hair, eyebrows, moustache, sidelocks or beard, can occur due to various reasons. Although numerous articles have been published on Follicular extraction unit (FUE) technique for scalp restoration, its efficacy for various situations in the maxillofacial regions is yet to be evaluated.

Objectives

To evaluate the efficacy of FUE technique for treating alopecia of the maxillofacial region secondary to different causes.

Methods

A total of 242 patients with alopecia of the maxillofacial region, secondary to either androgenetic, autoimmune, traumatic, burns, or post-surgical scarring were treated using FUE technique, with 0.8 mm motorized punches. In patients needing multiple sittings, 8–10 months period was allowed between the sittings. Patients were followed up for 1 year and the level of patient satisfaction was graded using a 5 point scale with 1 point for “not at all satisfied” and 5 points for “completely satisfied”. Any complications, if present, were also noted.

Results

Among the 242 patients, 224 underwent scalp, 12 underwent moustache, 3 underwent beard and 3 underwent eyebrow transplantations. Hair growth was observed in all cases between 2 and 8 months post surgery, and complete result was seen at 10–12 months. Most patients (n = 190) were completely satisfied, 34 were very satisfied, 10 were quite satisfied while 8 were barely satisfied with the surgical outcome. No major complications were noted. The scars in the donor area were visually imperceptible after 7–10 days.

Conclusion

From the maxillofacial perspective, alopecia in the maxillofacial region can be effectively managed using minimally invasive FUE technique of hair restoration.

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Abstract No: 0268

Incidence of anterior disc displacement of the temporomandibular joint in patients with dentofacial deformity

Dr. Kazuhiro Ooi

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Abstract

This study aimed to investigate the incidence of anterior disc displacement without reduction (addwor) of the temporomandibular joint (TMJ) in patients with dentofacial deformity.

Methods

88 female patients (176 joints) with skeletal class III and 33 female patients (66 joints) with skeletal class II malocclusion with or without anterior open bite and asymmetry were evaluated (study1). 30 female patients (60 joints) both with open bite and mandibular condyle bone changes (study 2). Magnetic resonance imaging (MRI) of the TMJ was used for diagnosis of addwor. Statistical analysis was performed to examine the relationship between addwor and skeletal structure. Results: study1; addwor was present in 37 (56.1%) of the 66 joints in class ii compared to 34 (19.3%) of the 176 joints in class iii (p.

Abstract No: 0276

Role of distraction osteogenesis in maxillofacial rehabilitation: our experience

Dr. Anuj Dadhich, Dr. Seemit Shah (Professor & Head) Dr. Harish Saluja (Reader)

Rural Dental College, Loni

Abstract

Distraction osteogenesis (do) is a method of generating new bone following corticotomy/osteotomy of bone and gradual distraction of bony segments. This method is based on tension-stress phenomenon described by ilizarov. The gradual bone distraction creates mechanical stimulus which in turns leads to biological response that causes new bone formation. The application of distraction osteogenesis in maxillofacial region has increased enormously in last couple of decades & it has withstood the test of time in management of severe deficiency of bone in maxillofacial region like management of a) deficient maxilla or midface b) severely hypoplastic mandible c) facial deformities secondary to TMJ ankylosis d) syndromic patients. This paper intends to discuss the current applications of distraction osteogenesis in maxillofacial region based upon our experience & literature review.

Abstract No: 0379

Is surgery an underutilized option?

Dr. Ashish Chakranarayan

Indian Naval Hospital Ship Kalyani

Abstract**Introduction**

Nonsyndromic mandibular corpus deformity in the sagittal plane usually presents as a class ii malocclusion, which could be either dental and skeletal. Corpus excess is also seen clinically but in lesser numbers as compared to the deficiency cases. Patients present with various complaints ranging from unacceptable appearance, inability to close the mouth properly, crooked teeth etc. There are various options available to manage the mandibular corpus deformity cases ranging from counseling, appliances, fixed orthodontics and surgery. The surgical options available are mandibular advancement/setback using the standard bssro and distraction osteogenesis. These procedures were being conventionally used in the triphasic i.e. orthodontic - orthognathic surgery - orthodontic sequence, however, to improve patient motivation and reduce treatment time the surgery first option is fast catching up.

Aim

Illustrating and comparing the conventional vis-à-vis the surgery first philosophy.

Material & Methods

06 cases have been included in the presentation. 02 cases of conventional triphasic treatment, 02 cases are of advancement by distraction osteogenesis and finally 02 cases of the modified protocol of surgery first.

Results

Approximately 8 mm bony movement was achieved in both conventional as well as surgery first cases. The amount of advancement achieved with distraction osteogenesis was approximately 11 mm

after a relapse of approximately 1 mm. Results have been stable over a 4 year follow up. In one case of surgery first, there was a midline discrepancy, which was noticed 2 months postoperatively. It was resolved by a second surgical intervention.

Conclusion

The triphasic conventional and distraction procedures have a time tested proven efficacy, however, surgery first is fast catching up as the modality of choice.

Abstract No: 0715

An alternative for erickson model table

Dr. S. Suryahanth Mihiran

KSR Institute of Dental Science and Research

Abstract

Preparing surgical stent is one of a important step in orthognstic surgery for that model surgery should be done with proper measurements. We need erickson model table for proper measurements for model surgery. Erickson model table is not available in every institution. Here we have an alternative for erickson's model table with simple instrumentation.

Abstract No: 0818

A 13 year single centre analysis of orthognathic cases

Dr. Aabu Varghese, Dr.Varghese Mani

Mani Speciality Dental Clinic, Thrissur

Abstract

This paper is a statistical analysis of orthognathic cases done in our centre during the last 13 years. We have analysed the growth in the number of patients,patient awareness, referral of cases, change in the variety of cases etc.some assumptions are also made during the analysis which are worth further investigation.

Abstract No: 1103

Evaluation of orthognathic surgery using the cad/cam splint

Dr. Manabu Habu, Motoki Tsurushima, Shinya Kokuryou, Daigo Yoshiga, Izumi Yoshioka and Kazuhiro Tominaga

Kyushu Dental University

Abstract

The jaw position in orthognathic surgery, particularly maxilla-mandibular osteotomy has been determined based on cephalometric prediction (CP). However, in facial asymmetry patients who require recontouring such as yawing, the jaw position analysis and splint design were difficult to carry out, because cp is a 2-dimensional

analysis. To produce the double splint, it is common to perform model surgery using a study model. The model is constructed using face-bow transfer of the jaw position determined by cp. However, there are obviously some differences between the procedures depending on the operators. In addition, no procedure to accurately reproduce the simulation results of the model surgery on the surgical field has been established. In reality, the jaw position is determined based on the reference point. To solve these problems, we have developed an accurate and convenient procedure to reproduce the simulation results on the surgical field. In this procedure, we ran a postoperative soft tissue-based simulation and determined the jaw position using the simulation results based on the preoperative 3-d CT data. We then produced the CAD/CAM double splint using the CT data. Here we report the summary of the procedure.a goal of jaw deformity treatment is to achieve esthetic and functional harmony. By using this procedure, we can make a treatment plan expecting the esthetically and functionally harmonious outcome for the patients with complex deformity such as facial asymmetry and can accurately carry out the plan.

Abstract No: 1167

Lefort 1 osteotomy versus anterior maxillary distraction for cleft maxillary hypoplasia

Dr. Sinai Khandeparker Rakshit Vijay, Sunil Richardson, Omkar Shetye,Praveen Sathish Kumar, Saurabh Kamat, Purva Vijay Sinai Khandeparker

Goa Dental College and Hospital

Abstract

Purpose: to evaluate and compare the results of anterior maxillary distraction and Le-Fort I osteotomy in management of cleft maxillary hypoplasia. Materials and methods:40 patients with moderate cleft maxillary hypoplasia were divided into 2 equal groups, one managed with standard Le-Fort I osteotomy (ogn) and the other managed using anterior maxillary distraction with a tooth borne palatal distraction. The patients were randomised irrespective of gender, type of cleft palate and amount of advancement needed.the stability and evidence of any relapse was evaluated using digitalised cephalograms taken before procedure(t1), immediately after procedure(t2) and at the last follow-up visit (t3). Perceptual speech assessment was carried out pre-op and 6 months post-op by 2 speech pathologist using perkins scoring system (2005). The development of complications intra or post-op was also noted.the data was tabulated and analysed. Results: the mean advancement in the ogn group was 7.82 mm while that in the amd group was 9.42 mm. 17 patients showed stable results in amd group when t2 values were compared with t3 while all patients in the Le-Fort I osteotomy group showed skeletal. Improvement in speech parameters was seen in 7 patients while the remaining patients had no worsening in speech outcomes in amd group. In the ogn group, worsening in speech was observed in 12 patients. The worsening in the ogn group correlated with the increasing amount of advancement more than 5 mm. Although the complications were higher in the amd group, the results were not statistically significant. Conclusion: Anterior maxillary distraction (AMD) is a suitable alternative to standard Le-Fort I osteotomy for management of moderate cleft maxillary hypoplasia. Long term stable results with negligible skeletal relapse are possible with an added advantage of unhampered or even improved velopharyngeal function.

Category – Reconstructive Surgery

Abstract No: 0283

Surgical strategy for lip deformity due to various causes

Dr. Kazuhide Matsunaga, Dr. Akifumi Enomoto, Dr. Takeshi Shimoide, Dr. Takao Mukai, Dr. Soichiro Toyodoma, Dr. Noriko Iwamoto, Dr. Haruya Suzuki, Dr. Suguri Hamada, Dr. Tetsuji Nagata

Department of Oral and Maxillofacial Surgery, Kindai University Hospital, Faculty of Medicine

Abstract

Background

We managed patients who had neoplastic, post-traumatic, atrophic and postoperative lip deformities.

Case description

Neoplastic; the patient had a hemangioma (17–14 mm) confined to the vermilion part of the lower lip. We performed the wedge excision of the tumor and labioplasty. Posttraumatic; the patient had post-traumatic deformity of the unilateral upper lip. The vermilion border demonstrated elevation toward the nasal base. We performed correction by Cronin's method. Atrophic; the patient had severe atrophy of the upper lip due to progressive hemifacial atrophy. We performed reconstruction of the upper lip with a cross-lip vermilion flap from lower lip. Postoperative; the patient had lower lip deformity after tumor resection and reconstruction with a flap. We performed debulking of the bulky flap and covered the raw surface with local flaps.

Results

The postoperative appearance and function of the lip of all patients were satisfactory.

Discussion

With regard to lip hemangioma, tumor can be removed by wedge resection, two-stage resection or reconstruction after resection. We performed labioplasty after the wedge resection. With regard to posttraumatic lip deformity, it is necessary for satisfactory cosmetic outcomes to extend the amount of the lip. Cronin's method seems to be a useful technique. With regard to of atrophic upper lip deformity, a cross-lip vermilion flap of the bilateral lower lip area has been reported. Our case also had severe atrophy of the unilateral lower lip. Therefore we selected a unilateral cross-lip vermilion flap. With regard to postoperative lip deformity, patients who have undergone lip reconstruction with a flap require secondary correction. We repaired the everted lip with debulking of the flap. It is important to perform treatment according to each patient's clinical features.

Abstract No: 0298

Advantages of 3D printed cutting guides in mandibular reconstruction

Dr. Rahul Jain, Dr. Sanjay Mahendru, Dr. RK Khazanchi

Medanta The Medicity

Abstract

Background

Free fibula is the most commonly used flap for mandibular reconstruction. The aim remains a functional reconstruction which is also aesthetically pleasing. However various methods described conventionally fall short of a precise reconstruction because in general they use 2D imaging and measurements to reconstruct a 3D structure. Computer aided designing and computer aided manufacturing (CAD-CAM) has revolutionized mandibular reconstruction. With this technique, it is now possible to reconstruct mandibular defects to near normal configuration with good function and aesthetics. This study is a review of our experience of 40 consecutive cases of mandibular reconstruction with free fibula flap using CAD-CAM and comparison with historical cohorts.

Aims and Objectives

To evaluate the benefits of CAD-CAM and customised 3D printed cutting guides in comparison to conventional methods in mandibular reconstruction with free fibula flap.

Methods

From may 2017 to April 2018, we used CAD-CAM and 3D printed cutting guides in 40 consecutive patients for mandibular reconstruction. Three parameters namely total operative time, post op occlusion and aesthetics were studied. The results were compared with 40 consecutive cases of mandibular reconstruction done previously with conventional method.

Results

Total operative time was significantly shorter in CAD-CAM group as compared to conventional group (562 ± 68 vs. 662 ± 68 min, p -value < 0.0001), only 1 patient developed malocclusion in CAD-CAM group as opposed to 6 patients in conventional group. Also patients in CAD-CAM group had a better aesthetic score than conventional group (3.64 ± 0.91 vs 2.55 ± 0.94 , p -value < 0.0001).

Conclusion

The use of CAD-CAM technology and 3D printed cutting guides offer significantly shorter operative time, with precise and accurate reconstruction that allows better functional and aesthetic outcomes in patients who undergo mandibular reconstruction with free fibula flap.

Abstract No: 0467

Free Flaps V/S Local Flaps

Dr. Pranay Pradeep Pardeshi, Dr. Ashok Mehta, Dr. Rajesh Valand, Dr. Amit Patil, Dr. Ritesh Gupta

BSES MG Hospital, Mumbai

Abstract

Background

The reconstructive surgeon has to restore defects with best aesthetic and function. In recent times, the high success rate of free flap has made the large defect reconstruction a possibility.

Aim

To assess the clinical outcomes in patients undergoing free flap and local flap reconstruction.

Methods

This was a retrospective study of 53 patients undergoing reconstructions with free flaps (31 flaps) and local flap (22 flaps) from June 2016 to June 2018. Types of free flap performed were anterolateral thigh, radial forearm and fibula. Types of local flap performed were pectoralis major myocutaneous flap, deltopectoral flap, nasolabial flap, forehead and scalp flap. Patients data were collected and analyzed for flap survival, complication, operative time, functional and oncological outcomes.

Results

The patients included 35 males and 17 females, with a mean age of 42 years. The most common tumor location was the buccal mucosa. The majority of the diagnosed tumors were squamous cell carcinoma. Overall flap success rate for free flap was 88% and for local flap was 100%. Venous thrombosis was the most common cause for re-exploration in free flaps. The average operating time for free flap was 7 h 30 min (simultaneously harvesting the graft) and for local flaps, was 5 h 50 min. Local flaps are economical than free flap. The most important advantages with free flap are replacement of bone tissue and reconstruction of large defects.

Conclusion

Free flap is a reliable method in reconstruction of large defect with good aesthetic and functional outcome. Local flap is effective in smaller defects but cannot replace bony tissue.

Reference

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Abstract No: 0532**Successful microvascular reconstruction of a massive & rare salivary gland neoplasm in a toddler - a case report**

Dr. Samar Bakht, Dr. Prashant Puranik

Kidwai Memorial Institute of Oncology

Abstract**Background**

Sialoblastoma is a rare salivary gland tumor, that recapitulates the primitive salivary gland anlage. The authors herein report a case of a successful microvascular reconstruction of a massive sialoblastoma arising from the left parotid gland in an 18 months old infant.

Case description

The child presented with a firm nodular mass on the left side of face with dilated veins, surface ulceration and left facial palsy, which had originally appeared and progressively enlarged since the age of 9 weeks. Superficial parotidectomy was performed at the age of 2 months, but the tumor recurred within a month. Radical parotidectomy was performed on the left side of the face, with posterior segmental mandibulectomy. Post resection defect included skin of left side of face from the preauricular region till nasal alae anteroposteriorly and from the zygomatic arch till the submandibular region cranio-caudally. Reconstruction was accomplished with a free anterolateral thigh flap based on septocutaneous perforators arising from descending branch of lateral circumflex femoral artery. Microvascular revision was performed 8 h postoperatively due to vascular thrombosis. Post revision the flap was healthy and patient

was discharged uneventfully on the 8th day after surgery. The major challenges faced in facial reconstruction of a toddler were massive size of defect, composite nature of defect, minute vessel calibre (0.2–0.3 mm), requirement of multiple anastomotic revisions due to frequent vascular spasms and subsequent thrombosis.

Results

Patient was healthy with no recurrence at 2 years follow up.

Conclusion

Sialoblastoma is a rare, aggressive and potentially malignant salivary gland tumor of childhood. An early aggressive surgical excision is essential for long term disease control alongwith prolonged periodic follow-up. Pediatric microvascular reconstruction can be very challenging due to small vessel caliber, and tendency of frequent vessel spasms may require multiple anastomoses in order to ensure flap survival.

Abstract No: 0810**Reconstructive surgery in romberg's disease - is addressing the soft tissue the key to success**

Dr. Vimalambiga Ramasamy, Dr Kannan Balaraman, Dr Raja Sabapathy, Dr Ravindra Bharathi, Dr Hari Venkatramani

Ganga Hospital

Abstract**Background**

Romberg disease is a disease of unknown aetiology causing unilateral hemifacial atrophy. Though it can be self-limiting, it can cause gross facial asymmetry with varying severity. A plethora of reconstructive options involving hard and soft tissues have been described with varying results, but stable results have been reported with soft tissue reconstructive options.

Objective

The aim of the presentation is to discuss the versatility of various soft tissue reconstructive options in Romberg disease.

Methods

Patients with varying severity of Romberg disease reporting to us were treated with different options tailored to specific situations. Three cases with severe form of disease involving the one side of the face were reconstructed with de epithelised anterolateral thigh flap. One patient with involvement of the mandibular region had a modified Washio flap and one patient with cheek involvement had fat injection. All the patients were followed-up periodically for at least 3 years.

Results and conclusion

All patients had successful reconstruction with no failures. The free flap group had gross facial edema which tended to settle in 6 months time. Multiple periosteal anchoring helped reduce long-term sagging of the flaps. The Modified Washio flap provided an ideal cosmetic option as the patient was keen on a beard. Fat injection is stable if used in a confined area involving one region. Addressing soft tissues is the key to achieving stable reconstruction in such cases.

Abstract No: 0862**Reconstruction using sternocleidomastoid muscle flap/
posterior belly of digastric muscle flap or primary
closure following superficial parotidectomy:
a comparative study***Dr. Anshul Rai**All India Institute of Medical Sciences, Bhopal***Abstract****Background**

The most common complications following superficial parotidectomy are formation of contour deformity, and development of Frey's syndrome. Multiple modalities are being used to prevent these complications. We hereby intend to compare the reconstruction modalities (sternocleidomastoid (SCM) muscle flap, posterior belly of digastric (PBD) muscle flap) with primary closure (PC) following superficial parotidectomy.

Methods

A comparative study was designed, which included 15 patients requiring parotidectomy. These patients were divided into three groups, namely, SCM, PBD and PC. The functional outcome (facial nerve involvement, Frey's syndrome, ear lobule sensation, and neck movements), and the esthetic results were evaluated subjectively and objectively. The outcomes were statistically evaluated using Chi square test and students t test.

Results

Facial nerve palsy occurred in 2 cases in each group, and all of them recovered completely within 6 months. The minor starch iodine test was positive in 1 patient in SCM group, in 2 patients in PBD group and in 4 patients in the PC group, although only one patient of PBD group and 3 patients of PC group complained of gustatory sweating. Neck movements were unaffected in PBD group and PC group, however 1 patient complained of mild discomfort and pain during neck movements in SCM group.

Conclusion

Primary closure showed worst results regarding cosmetic deformity. Hence, it is recommended to mandatorily reconstruct the defect. However, the sternocleidomastoid muscle flap is a better cosmetic option compared to posterior belly of digastric muscle flap. In cases with larger defects, a combination of both the flaps can be used. SCM flap also lowers the incidence of Frey's syndrome objectively and subjectively, with no reported hazard of the spinal accessory nerve and mildly affected neck movements.

Abstract No: 0106**Protocol for Computer Simulated 3D Modelling
for Mandibular Reconstruction***Dr. Sudeep Subran, V Gopalakrishnan**MDC Kirkee (West)***Abstract**

Acquired mandibular continuity defects adversely affects occlusion, mastication, speech and deglutition. Reconstruction of such defects is thus important to establishing the functional integrity of the stomatognathic system. Computer aided modelling has been reported to

enhance the accuracy of reconstruction of mandibular defects utilising a variety of grafts. However, in the absence of an occlusal index to align the mandibular segments, repositioning the latter in their correct anatomical position is challenging. A protocol for preparation of surgical template utilising computer aided simulation and three dimensional printed models is presented. Management of a case of secondary mandibular defect following a failed reconstruction of comminuted fracture of the mandibular body sustained via a gunshot wound is presented as an illustrative example in developing this protocol.

Abstract No: 0111**Facial reanimation - feasibility of masseteric nerve
as a donor***Dr. Kannan Balaraman, Vimala Ramani, Hari Venkatramani, Raja Sabapathy**Ganga Hospital***Abstract**

Aims and objective: the aim of the study was to evaluate and assess the efficacy of facial re-animation with masseteric nerve as the donor nerve. **The study involved patients undergoing facial reanimation with either direct facial nerve coaptation and reinnervation of functioning muscle transfer in facial palsy materials and method:** the study involved 5 patients of which 2 underwent direct coaptation to the buccal branch of injured facial nerve and three had innervation of the functioning muscle. The male/female ratio was 2:3 and involved 2 congenital, 2 post traumatic and 1 post tumor resection cases. 3 patients had functioning muscle transfers and 2 had cross facial nerve grafting depending on their clinical indication. The masseteric nerve donor was from the ipsilateral side while sural nerve was used for nerve graft. The masseteric nerve had a fairly consistent anatomic presence in the muscle found inbetween the middle and inferior bellies. the patients were commenced on physiotherapy a month after surgery. early recovery signs were noted within 2 months with progressive improvement subsequently. **Results and conclusion:** The technique of direct nerve transfer using nerve to masseter as a donor in 3 patients has resulted in significant improvement in restoration of function and symmetry. Spontaneous activity with minimal synkinesis were the other advantages noted. The advantage of this nerve as a donor is its constant reliable anatomy, large axonal count which help with powerful reanimation of facial muscles as well as functioning muscle transfer.

Abstract No: 0125**Predictors for free flap failure in head and neck
reconstruction***Dr. G. R. Karthikeyan, Dr. Mathan Mohan, Dr. Balaguhan, Dr. Meera Thinakaran, Dr. Deepak V, Dr. Vinod Krishna**Karpaga Vinayaga Institute OF Dental Sciences***Abstract**

The use of free tissue transfer for reconstruction of complex defects after ablation of head and neck tumors is a well-established method

worldwide. Head and neck reconstructive surgery represents a major challenge facing the need to achieve a good cosmetic and functional outcome. Free flap surgery is overall considered the gold standard in head and neck reconstruction, with a success rate of 95%. Despite the current widespread use and high overall success rate of microvascular free tissue transfer in the head and neck, flap failure rate remains relatively common. In fact, despite improved surgical techniques, hypoperfusion and subsequent flap failure remains a concern. However, several influencing factors can still deteriorate the outcome. However, flap loss remains a possibility, leading to poor impact on quality of life in patients, need of additional surgery, prolonged hospitalization and costs. Consequently, it is important to know which factors lead to an increased risk of flap failure, so that measures can be undertaken to reduce this risk and to improve patient counselling. The aim of this study was to identify the factors associated with free flap complications and failure in head and neck reconstruction by free tissue transfer.

Abstract No: 0166
Feasibility of non-vascularized free fibular graft for mandibular reconstruction

Dr. Lokesh Chandra, Dr. Dharendra Srivastava, Dr. Sonal Mishra

ESIC Dental College and Hospital, Rohini, New Delhi

Abstract
Background

Mandibular reconstruction still remains a challenge in terms of restoring the function and esthetics completely. Vascularized fibular free flaps remain the gold standard of mandibular reconstruction due to good success rate even in irradiated patients and areas with less soft tissue cover. However, the non-vascularized fibular grafts have been used to reconstruct mandibular defects at less cost, shorter duration of surgery and hospital stay than vascularized fibular flaps.

Research aims/objectives

To evaluate the feasibility of non-vascularized free fibular graft for mandibular reconstruction methods: this study includes patients who underwent right segmental mandibulectomy followed by reconstruction using non-vascularized fibular graft. Patient follow-up was done at 1 month, 3 months, 6 months and 1 year after surgery for evaluation of clinical, radiological outcome of the graft.

Results/findings

The graft take-up with the host mandible was optimum on either side. There was slight mandibular deviation to the operated side on opening the jaw, no difficulty in speech with optimal mouth opening. There was no significant change in graft height on radiograph during follow-up. Donor site was not associated with any complications.

Conclusions

Non-vascularized free fibular graft is a feasible option for mandibular reconstruction.

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Abstract No: 0193

Transport distraction osteogenesis in maxillofacial region using indigenously designed distraction devices: report of three cases

Dr. Neeraj Kumar Dhiman, Dr. Ajit Kumar Vishvakarma, Senior Resident, FDS

Faculty of Dental Sciences, IMS, BHU, Varanasi, India

Abstract
Aims and Objectives

Several lesions occurring in the maxillofacial region require an extensive resection with safety margins as the treatment of choice to minimize recurrence. The rehabilitation and reconstruction in these patients poses a great challenge for the maxillofacial surgeons, especially when the complex maxillofacial hard tissue is involved. This presentation is to highlight a process of attempted maxillofacial reconstructions in three cases using indigenously designed distraction devices.

Introduction

Traditionally, osseous free flaps harvested from donor sites or bone grafts, used with or without microvascular reconstruction techniques are the procedures of choice for the reconstruction in the maxillofacial region, however, the weaknesses of bone graft still exist, and complications associated with the donor site are frequent.

Material and method

Distraction osteogenesis involves a three-step process in which bone adjacent to the defect is osteotomized and gradually distracted as a transport disc with the help of a mechanical device, followed by formation of regenerate with subsequent consolidation and remodeling. Use of indigenously designed custom distractors provides precise anatomical configuration and good results.

Conclusion

Bone transport distraction osteogenesis (btDO) provides a promising alternative to traditional grafting techniques. However, existing btDO devices have many limitations. Transport distraction osteogenesis is an option for such reconstructions to produce regenerate of similar anatomical tissue without donor site involvement.

Abstract No: 0225

Island FAMM flap: innovative modification for tongue and floor reconstruction

Dr. Ravi Veeraraghavan, Dr. Shawn T. Joseph, Dr. Krishnakumar T. Dr. Subramania Iyer

Amrita School of Dentistry, Kochi, Kerala

Abstract

Reconstruction of ablative defects following partial resection of tongue and floor of mouth sites pose a significant challenge to the surgeon. The soft tissue donor tissue should be very thin, highly pliable, potentially mobile, easy to harvest, cosmetically acceptable and must withstand the hostile mechanical and chemical milieu of the oral cavity. The reconstruction can be achieved by skin/mucosal grafts and by various local, regional and free flaps. The commonly used flaps include the nasolabial flap, submental flap, infrahyoid flap, and pedicled facial artery musculomucosal (famm) flap. The famm flap is a reliable and versatile pedicled flap on the

cheek based on the angular branch of facial artery, and has mucosal and muscular components. Its oral location and consistent pedicle has rendered it a popular reconstruction option for oral mucosal defects among cancer surgeons. Some of the major drawbacks of this flap are (i) the need for the pedicle to cross the dentition (thus making it relatively unsuitable for tongue and palate when the patient is dentulous) and (ii) need for a second surgery to divide the pedicle. A recently suggested modification involves islanding of the flap and tunneling it around the lower border of the mandible into the lingual aspect, in a single-stage procedure. This method is ideal for the reconstruction of small to medium sized defects of tongue (especially ventral surface) and floor of mouth. We present our experience with this modification, which gives excellent mobility for the flap and removing the need for a second surgery.

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Abstract No: 0229

Chimeric superficial temporal artery based flap in reconstruction of oro-facial defects

Dr. Narendra Babu BK, Anson Jose

Army Dental Centre Research and Referral

Abstract

Oro-facial defects, congenital or following a trauma results in an aesthetic and functional compromise along with psychological suffering. The temporal region is an excellent donor site due its rich vascular supply and availability of diverse tissues-skin, fascia, muscle, galea, calvarial bone and pericranium. The chimeric superficial temporal artery based flap is a resourceful flap and is used primarily in the reconstruction of midface, orbit, periorbit and palatal defects. The proximity of the flap to the defects allows harvesting the fascia or muscle or skin or as a composite tissue flaps depending upon the requirement of the case. This presentation aims at highlighting the utility of the flap in our case series of orofacial defects.

Abstract No: 0259

Vascularized composite free flaps for mandibular defects

Dr. Yoshio Ohyama, Narikazu Uzawa, Yasuyuki Michi, Miho Mizutani, Masashi Yamashiro, Kentaro Tanaka, Kazuki Hasegawa

Shizuoka City Shizuoka Hospital

Abstract

Mandibular defects after tumor surgery and trauma will result in severe or significant facial deformity and oral dysfunction, which influence the quality of life of the patients. Vascularized composite free flaps play an important role in improving cure rate and life quality in those patients. The aim of this study is to review and evaluate the results of the vascularized composite free flaps for

mandibular reconstruction in our department. Eighty-one patients (58 males and 23 females with a median age of 51.9 years) underwent vascularized composite free flap for mandibular reconstruction at maxillofacial surgery department, Tokyo Medical and Dental University from January of 1995 to March of 2017. The pathology of these patients involved 58 malignant tumors, 21 benign tumors, 1 trauma, and 1 osteoradionecrosis. Sixty-nine patients were reconstructed immediately and 12 patients were reconstructed secondarily. Sixty-six scapular free flaps and fifteen fibula free flaps were used for those reconstructions. Eleven patients had resections of the mandible including unilateral condyle. The most common complications at the recipient site were dehiscence of the wound and infection, but they were controlled in a short term by conservative treatment. The overall flap success rate was 98.8%. The only one case of this series with fibula flap showed total necrosis. This defect was successfully repaired using anterolateral thigh flap. All patients were followed from 5 months to 17 years. Almost all patients were satisfied with the esthetic and functional result on both the donor and recipient sites.

Abstract No: 0271

Role of turmeric in management of alveolar osteitis (dry socket): a randomised clinical study

Prof. Lone Parveen Akhtar

IGGDC Jammu

Abstract

The aim of this study was to study the therapeutic, healing benefits of turmeric, an herb commonly used in Asia. Material & methods: the study was conducted in department of oral & maxillofacial surgery Indira Gandhi government dental college Jammu. 178 patients were selected from the outpatient department of oral & maxillofacial surgery. The diagnosis of dry socket was made clinically. Turmeric dressing with mustard oil was given in group A & in group B ZnO Eugenol dressing was given. Results: In this study there was significant reduction in pain, inflammation & discomfort after turmeric and zoe dressing. Wound healing was seen faster, than dressing with zoe. There is no side effect of turmeric. Statistical analysis was done $p < 0.05$, was found statistically significant conclusion the present study was done to use turmeric to promote wound healing. We found that the use of turmeric at the site of an injury by topical application promotes healing of wounds.

Abstract No: 0293

Clinical outcome of double barrel fibula flap in mandibular reconstruction

Dr. Saurabh Kumar, Dr. Rabin Chacko, Dr. Arun Paul, Dr. Jomi Porinchu

Christian Medical College, Vellore, Tamil Nadu

Abstract

Purpose: the vascularized free fibula flap is considered as the foremost choice in the reconstruction of mandibular defect. Often single strut of fibula falls short of the adequate height of the native mandible henceforth posing a prosthodontic challenge and subsequent difficulty in fabrication of conventional dentures or implant supported prosthesis. Double-barrel fibula flap is considered for overcoming this

height discrepancy. This article aims at highlighting the outcome following the use of double barrel fibula flap. Materials and methods: patients opting for double barrel free fibula tissue transfer following resective jaw surgery between January 2015 to December 2017 in a South Indian tertiary care centre were evaluated. These patients were retrospectively assessed for the site and size of the defect reconstructed; presence or absence of post-op complications in form of skin flap necrosis; and feasibility of post-op prosthodontic rehabilitation. Results: out of 11 patients with double-barrel free fibula flap, 7 patients were diagnosed with squamous cell carcinoma of the mandible, rest 4 patients had benign jaw tumors. Microvascular fibula transfer was completely successful in all cases. In two of the cases, there was partial necrosis of the extra-oral skin flap and one case had complete intraoral skin flap necrosis. The original mandibular contour as well as the height of the alveolus was maintained postoperatively; the reconstructed mandibular length ranged between 4.36 cm to 9.75 cm, the reconstruction height of the double-barrel fibula achieved, ranged from 2.28 cm to 3.19 cm. Prosthodontic treatment with conventional removable partial denture was completed in 3 patients, all these patients underwent reconstruction for benign pathology. Conclusions: mandibular segmental defects can be aesthetically and functionally reconstructed by a double-barrel vascularized fibula flap that matches the height of the native mandible and helps in the future prosthodontic rehabilitation.

Abstract No: 0315

Therapeutic assessment of cranioplasty

Dr. Maj. Lalit Janjani, Brig ID Roy Lt Col Rohit Sharma

15 Corps Dental Unit

Abstract

Background

Cranioplasty using the same autologous bone removed at the time decompressive craniectomy (dc) if available is always the first choice. Aim & objectives: to evaluate the therapeutic efficacy of cranioplasty post dc using functional independence measure (fim). The objectives were to measure the changes in fim score, to draw a comparison with pre cranioplasty and the difference in outcome of cases managed among the 2 groups (group-I: autologous bone, group-II: titanium mesh).

Materials & methods

A retrospective study was designed from patients who underwent unilateral cranioplasty post dc for traumatic brain injury (tbi) from 2005 to 2017. The primary binary predictor variable was cranioplasty (autologous bone/mesh). the primary outcome variable of interest was increase/decrease/status quo in the fim scores. The secondary outcome variables included evaluation of immediate complications. Mann–whitney u test was used to evaluate the difference between the scores.

Results

Increase in fim score (motor) for group-i ($p = .01278$) and group-ii ($p = .00112$) were statistically significant. Increase in fim score (cognition) for group-i ($p = .17384$) and group-ii ($p = .9492$) were statistically insignificant. Statistical evaluation of primary outcome variable (i.e. increase/decrease/status quo in the fim scores) and secondary outcome variables (i.e. immediate complications) revealed statistically insignificant difference between the two groups with respect to improvement ($p = 0.51$).

Conclusion

Irrespective of the type, cranioplasty significantly improves fim (motor) score.

Abstract No: 0373

Use of superficial temporal fascia flap for treatment of post radiation trismus: an innovation

Dr. Tushar S. Deshmukh, Lt Col Rohit Sharma

Air Force

Abstract

Post radiation trismus severely reduces the quality of life. Radiation causes fibrosis of muscles of mastication resulting in severe restriction of mouth opening. Treatment options are limited as most of the local flaps are in the radiation zone. The present case is the first case in existing literature where, following the release of fibrosis secondary to radiation, superficial temporal fascia (stf) was used to cover the defect with excellent results and no recurrence after a year of follow up.

Abstract No: 0598S

Comparison between two different microvascular anastomosis: conventional suturing vs microvascular couplers

Dr. Ajay Mohan

Apollo Hospital, Karur

Abstract

Anastomosis plays an important role in microvascular reconstructive surgery. Ischemic time has been the major concern for the surgeon. The aim of the present study was to evaluate whether the usage of microvascular coupler reduces the ischemic time significantly than conventional suturing technique. 30 patients who needed mandibular reconstruction were divided into groups randomly. In group 1 microvascular anastomosis was done with conventional suturing technique, in group 2 microvascular anastomosis was done with couplers. Intra operatively patency, leakage and tissue perfusion were checked. The ischemic time & anastomotic time were calculated. In our results, there was significant decrease in anastomotic as well as ischemic time in group 2. It was concluded that this overall decreased the operating time which in turn reduced number of other adverse effects due to prolonged operating time.

Abstract No: 0599

Surgery for benign trismus: palatal island flap revisited

Dr. Jay Kulkarni

Neeti Clinics Pvt. Ltd., Nagpur

Abstract

Oral submucous fibrosis (osmf) tops the list of etiological factors for benign trismus. There is a high incidence of osmf in central india owing to the significant consumption of areca nut, along with betel nut leaves and tobacco. What differentiates it from other relevant factors is the progressive irreversible fibrosis of the oral mucosa,

buccal mucosa in particular. In the management, after the initial phases of medical therapy and physiotherapy, surgical intervention is the only possible option in severe trismus. A wide number of surgical treatment options are being practised for the reconstruction of buccal defects in trismus surgeries. Palatal island flap, amongst them, is a versatile option that is not being used widely to its complete potential. For its vascularity, ease of harvesting, minimal donor site morbidity and its reach to cover the defect, palatal flap stands out as one of the most promising options for the reconstruction of buccal surgical defects. Moreover, with adequate training an oral & maxillofacial surgeon can be completely capable of planning and executing a trismus surgery without being dependant on any other surgical fraternity for reconstruction. This is our experience of using palatal island flaps in 33 cases for reconstruction in benign trismus surgeries.

Abstract No: 0619

Regeneration potential of costochondral graft in mandibular reconstruction in children - case report

Dr. Ramya Siddaiah, Dr. Saikrishna D

JSS Dental College & Hospital

Abstract

Background

Reconstruction of mandibular defects following tumor resection in children is a particular challenge. A multitude of techniques both autogenous and alloplastic have been described in literature. The most widely accepted autogenous technique involves the costochondral graft and makes it ideal choice in children due to its growth potential. Also, it is preferred due to its ease of adaptation to the recipient site, gross anatomical similarity to the mandibular condyle, and the reported low morbidity rate at the donor site.

Aim/objectives

Evaluation of regeneration potential of costochondral graft in mandibular reconstruction in children.

Patient & method

A 5-year-old boy was brought to us because his left mandible had been swollen for 3 months. The clinical, radiological and histopathological examination showed a unicystic ameloblastoma of mural variant. We did segmental resection of the left mandible including condyle, the coronoid process, the ramus, and part of the body of mandible distal to lower left e through an extended sub-mandibular incision. The periosteum at the resection site was retained and reconstructed immediately with a costochondral graft from the fifth rib using titanium plate and screws.

Results

After 1 year follow up, a new condyle, coronoid process, ramus, and body of mandible had formed. An orthopantomogram showed that the bony height was similar to that of other side, and occlusion corrected. Adequate mouth opening of 35 mm with 2 mm of lateral excursion was achieved, and there were no problems with the temporo-mandibular joint or facial asymmetry. No post operative complications were noted on long term follow up and a chest radiograph showed a newly formed fifth rib on the right side.

Conclusion

Our case has shown positive outcome of costochondral graft and its regeneration without any complications.

Abstract No: 0705

Perioperative mangement of maxillofacial free flap reconstruction: review of literature

Dr. Vidya Devi Vuyyuru

Kamineni Institute of Dental Sciences

Abstract

In view of the complex anatomical structure and function of the head and neck region, free flaps have extensive application in maxillofacial surgery and are considered the over all gold standard of maxillofacial reconstruction with a success rate of above 95%. It is also, however a delicate and technique sensitive procedure that requires intense and exact preoperative planing and meticulous intraoperative and post operative care, not only from the surgeon but also from the assistants and others responsible for the care of the patient. The aim of this paper is to review the available literature on the care and management of free flaps in maxillofacial reconstruction, to build a consolidated text to identify the preoperative risks, manage the intraoperative conditions, identify post-operative risks, and complications, and provide ideal care to the patient.

Abstract No: 0745

Versatility of temporalis muscle flaps in reconstruction of various maxillary defects

Dr. Nisharudeen K, Dr.N.Venkadasalapathi

Hannah Joseph Hospital

Abstract

Temporalis muscle flap is used for reconstruction of partial maxillary defects and interpositional arthroplasty of Temporo mandibular joint (TMJ) successfully for long time. In this case series we have used temporalis muscle flap to obliterate unilateral and bilateral complete maxillary defects in patients who are not able to afford free flaps or custom milled implants and in patients whose medical status doesn't permit long surgical hours. The surgical steps to raise the flap are simple, but the dissection must be careful to avoid damages to the fronto-temporal branches of the facial nerve on the outer surface, and to the feeding vessels on the inner surface of the temporal muscle. In the present series, no major surgical complications were observed. No injuries to the facial nerve branches were reported. Neither total nor partial flap losses were experienced. Post-operative aesthetic and functional results were satisfying.

Abstract No: 0843**Cranioplasty: its therapeutic role and effect on quality of life (qol)***Dr. Azad Khan Choudhary, NK Sahoo, sudashan Bhatt**Indian Army***Abstract**

Cranioplasty is the surgical repair and restoration of a skull defect, thus achieving morphological and functional rehabilitation of the cranial vault. In addition to the cosmetic and protective roles, cranioplasty has also been reported to have a functional and therapeutic role as it sometimes helps to reverse features of a condition called mts

Material and Method

Retrospectively evaluated 29 consecutive patients treated with cranioplasty between 2009 and 2017 in our tertiary hospitals. Data were acquired regarding demographic, surgical and medical aspects and complications. No single specific reconstruction material was evaluated for patients procedures all patients were diagnosed, surgically planned and treated according to a standardized treatment protocol of our institution. The effect of the procedure on quality of life was measured using the Glasgow benefit inventory (GBI) results a total of 25 patients filled in the questionnaires. The mean total gbi score of the overall study population (n = 25) was + 26.1 (95%CI 16.8–35.4, p < 0.001) (Table 2) reflecting a statistically significant benefit from the procedure on the overall qol. Subscale analyses showed a mean general health score of + 34.9 (p < 0.001), social support score of + 5.3 (95%CI, – 0.9 to 11.5, p = 0.088) and a physical health score of + 11.3 (95%CI 0.7–22.0, p = 0.038). Statistically significant results could be found with regard to the general health and physical health subscale.

Conclusion

The observations and findings of cases presented support the fact that cranioplasty procedure can serve not only as a merely cosmetic procedure but as a definite therapeutic procedure and bring about a definite reversal in the neurological deterioration and sensorimotor deficits.

Abstract No: 0927**Dextran induced anticoagulopathy in free flap reconstructions - is it worth the risk?***Dr. Praveen Kumar S, Dr. Vikas Dhupar, Dr. Yuri Dias, Dr Francis Akkara, Dr Omkar Shetye, Dr Saurabh Kamat, Dr Rahul Kamat, Dr Rakshit**Goa Dental College and Hospital***Abstract**

Success in microsurgery requires intact circulation via microvascular blood vessel anastomoses. Although the clotting mechanism prevents injured tissues from bleeding, it can be disruptive to a microvascular repair - inhibiting blood flow and promoting flap failure. The role of routine post-operative anticoagulation in microsurgery has been debated for years but has not been defined conclusively. Anti-coagulation can increase the chance of hematoma both at the flap donor and recipient sites, and even in rare circumstances, may cause an allergic reaction and death. We here by present a case of free fibula osseous cutaneous flap reconstruction in which dextran 40 associated coagulopathy lead to fatal complication. This presentation shall review the relevant literature and high light the risk factors associated

with use of pharmacological agents used to increase micro circulation in head and neck reconstructive surgery.

Abstract No: 1099**Mandibular reconstruction with free fibula flaps: a retrospective evaluation***Dr. Naseer Mohammad, Dr. Mohanavalli (PROF & HOD)**ESIC Medical College Hospital***Abstract**

The aim of this study was to evaluate surgical outcomes in patients who had undergone free fibula flap transfer for malignant head and neck tumors and various pathologies. A retrospective chart review was performed to identify patients who had undergone free fibula flap transfer for mandibular reconstruction after malignant tumor resection in our institution between March 2014 and July 2018. Enrolled patients were divided into an elderly group (75 years old) and a younger group (25 years old). Overall, 08 patients underwent reconstruction with free fibula flap. Not much post-operative complications encountered during follow up. The success rate of free fibula flap transfer was 100%. No perioperative mortality was encountered. No patient reported gait disturbance as a donor site complication or any other major complication. The incidence of postoperative complications did not differ significantly between the elderly and younger groups. Almost no difference in postoperative course was seen between the groups. Elderly patients appear to tolerate free fibula flap reconstruction just as well as younger patients. We evaluated the facial outcomes, aesthetics and function, complication at donor and recipient site and psychological aspect of the patient.

Abstract No: 1175**Sparing condylar head in hemimandibular resection favours joint rehabilitation***Dr. Sailesh Kumar Mukul**All India Institute of Medical Sciences Patna***Abstract****Introduction**

Reconstruction of oro mandibular defects secondary to ablative surgeries often demand significant consideration for design and pattern of resection which works in favors of challenging head and neck reconstructive surgery. Vascularised free fibular flaps are currently regarded as gold standard for mandibular reconstruction. But they too have undesired sequelae like ankylosis, pain, poor incisal opening, mandibular deviation and bone resorption when restoration of condylar head is attempted. It has been a common practice among ablative surgeons to disarticulate the joint in benign and malignant tumors requiring hemi mandibulectomy irrespective of pathological involvement of joint or not. This study is a single institution case a series where an attempt has been made to assess the gains in relation to joints function and rehabilitation after condylar preservation in patient requiring hemi mandibulectomy.

Aim and objective

The aim of the study is to evaluate joint function and rehabilitation in subjects who undergo hemi mandibulectomy with condylar head preservation and vascularised fibular reconstruction.

Method

It is an observational study which was carried out in a single institution in series of subjects who underwent hemimandibulectomy with the condylar (tm joint) preservation and vascularized fibular reconstruction for various mandibular tumors.

Result

It was observed that the vascularity and ligamentous support of the unresected condylar head reduced the morbidity of mandibular reconstruction as it relates to temporomandibular joint (TMJ) function.

Conclusion

In summary, preservation of condylar head and joint proper in hemimandibulectomy during various benign and malignant oro mandibular tumors show better joint function and rehabilitation after vascularised free fibular flaps for oro-mandibular defects. We think that the additional time and effort are required with this technique are warranted to preserve the normal anatomy and function of the temporomandibular joint.

Keywords Ankylosis, hemimandibulectomy.

Category – Research New Technologies**Abstract No: 0171****A potential drug for osteoporosis without possible osteonecrosis of jaws**

Dr. Gnanasagar TJ

Indira Gandhi Institute of Dental Sciences

Abstract**Background**

Bisphosphonates are widely used for treating osteoporosis in elderly and metastatic bone diseases. Unfortunately, nitrogen containing bisphosphonates cause osteonecrosis of jaws, which has no cure till now. So, the next logical step would be to find a drug which do not cause osteonecrosis.

Aim

To achieve its therapeutic effect, bisphosphonates kill the osteoclast cells in order to stop bone resorption, thereby bringing osteoporosis to a halt. This disturbs the balance between bone formation and resorption, causing dead bone. A new drug molecule has been discovered that can inhibit bone resorption without killing the osteoclast. This study is done to establish the drugs' function in in vitro and in vivo animal studies.

Methods

Mouse osteoclasts were seeded on dentin slices. The dentin slices were then treated with or without Dynasore for 48 h, and stained for f-actin. After removal of cells, the dentin slices were stained with Mayer's hematoxylin to observe resorption pits. To evaluate the effect of Dynasore on bone resorption in vivo, we used the RANKL-induced bone loss model. Dynasore and RANKL were injected intraperitoneally into 7-week-old female mice. Bone mass in the distal femur was analysed using micro-CT analysis.

Results

Dynasore inhibited actin ring formation in osteoclasts cultured on dentin slices, and also inhibited the formation of resorption pits by osteoclasts. A time-lapse image analysis using osteoclasts expressing actin fusion protein showed that Dynasore disrupted actin rings in osteoclasts within 30 min. The administration of

Dynasore restored RANKL-induced trabecular bone loss in mouse femurs.

Conclusions

Dynasore inhibits only bone resorbing activity, reversibly, without damaging the osteoclast. So, Dynasore could probably be a potential starting drug for osteoporosis without osteonecrosis.

Abstract No: 0233**Peek PSI implant in craniofacial trauma**

Dr. Siddhartha Chakraborty

Divine Hospital Kolkata

Abstract

As maxillofacial surgeons, we do lot of trauma in the craniofacial region. In this modern fast moving era, we often get high velocity road traffic accidents, where primary reconstruction is difficult due to various reasons. Custom made implants are coming up in a big way. We present a case of a patient-specific implant in a case with post traumatic deformity, using Polyether ether ketone (PEEK) material for craniofacial reconstruction. This is probably the first report of the use of this material in India for a huge defect of this kind.

Abstract No: 0244**3D printing opulence in residual malar deformity**

Dr. Lakshmi Shetty

Dr. D. Y. Patil Dental College and Hospital

Abstract**Background**

Craniofacial skeleton is one of the most anatomically complex regions of the body. Three-dimensionally printed models have great utility in preoperative planning; Oral and maxillofacial surgeons can rehearse complex operations, potentially reducing operative times and thereby anesthesia risk and blood loss. Opportunities abound for 3D printing, specifically in trauma and reconstructive facial surgery. This paper attempts to describe the opulence of 3D printing in a maxillary residual deformity case, which has been one of its kind in India, and an extensive review of the future of 3D models, to 3D implants in maxillofacial reconstruction.

Case description

A 35 year old male patient, with a history of trauma 2 years back, reported with a residual maxillary deformity in the right malar region. The patient wanted the correction of the residual deformity, which had a web of comminuted fractured bone in the right infraorbital region, extending towards the lateral orbital region and a deficient malar prominence.

Results

This case went in for a team approach, with stereolithographic model planning, 3D designing of the implant for malar region, and preparation of the 3D implant by additive manufacturing. This led to the success of reshaping of the face of the patient.

Conclusion

3D printing provides endless developmental possibilities for restoring aesthetics, especially post trauma, and bridging the gap between 3D art and surgical skill. Facial disfigurement has a severe impact on the quality of life, and 3D opulence is the solution.

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Abstract No: 0883

Proteomic analysis of human amniotic membrane using mass spectrometry

Dr. Asish J Rai, Dr. Ashmitha K

A B Shetty Memorial Institute of Dental Sciences

Abstract

Background

Human amniotic membrane (HAM) as a scaffold is well known for proliferation of epithelial cells with minimum inflammation, anti-microbial and anti-scarring property during the healing process. Regardless of its extensive use, key elements of the membrane and its exact mechanism(s) of action remain to be elucidated. Unfortunately, over the years, differing clinical reports have suggested variations in the efficacy of HAM utility. In consequence, there is a need to analyze the content in HAM, which will help to ascertain its therapeutic use.

Aims and Objectives

To identify the proteins present in homogenate of human amniotic membrane.

Methods

Amniotic membrane obtained from a normal full term mother was homogenised using food processor. 1 mg of HAM and proteolytic inhibitor was centrifuged at 8000 rpm, at 40c, followed by acetonitrile depletion with HPLC grade solution for dilution. The sample underwent in-solution trypsin digestion. Peptides were subjected to matrix assisted laser desorption/ionization, Time of flight-mass spectrometry peptide mass fingerprint (PMF) analysis, and electrospray ionization quadrupole- time-of-flight mass spectrometry/mass spectrometry.

Results

A range of identified proteins, including: Toll-like receptor 6, glycoporphin-c isoform x1, megakaryocyte and platelet inhibitory receptor g6b, CXC motif chemokine 16, Glutamate receptor ionotropic N-Methyl-D-Aspartate receptor subtype 3a, Keratin 1 and Keratin 6b, were determined after subjecting to Mascot data base search.

Conclusions

The above proteins play a critical role in accelerated wound healing mechanisms involving HAM. This proteomic profiling allows the

explanation of relations between cellular and molecular activity during graft placement of HAM.

Abstract No: 1074

Suprazygomatic maxillary nerve block for isolated zygomatic arch fracture reduction

Dr. Dibir R

Govt. Dental College, Kottayam

Abstract

Background

Improvements in general anesthesia has made the surgical procedures more comfortable for both the patient and surgeon. But in centres where there is limited accessibility to GA, the technique of regional anesthesia becomes inevitable. Less commonly described in the literature are the extra oral techniques that have a wide spectrum of indications and advantages as compared to the intra oral approaches. This study is an attempt to evaluate the effectiveness of the extra oral suprazygomatic approach to block the maxillary nerve in patients undergoing isolated zygomatic arch fracture reduction.

Aims and Objectives

To determine the effectiveness of maxillary nerve block through frontozygomatic angle approach in patients undergoing isolated zygomatic arch fracture reduction.

Methods

The study was conducted over a period of 18 months. 50 patients were included in the study. 3 ml of 2% lignocaine with 1:80,000 epinephrine was administered using 21 gauge 45 mm long needle through frontozygomatic angle approach. The parameters assessed were: time required for the onset of anesthesia, pain grade scale during injection and during surgery, inter-incisal opening before and after the procedure, and complications. All the parameters were expressed as mean values with standard deviations.

Results

70% of patients experienced no pain and 30% patients experienced only mild pain during the injection. 80% of the patients reported only mild pain during the fracture reduction and 20% patients experienced moderate pain which could have been due to low pain threshold or anatomical variations.

Conclusion

The present study has favoured the frontozygomatic angle approach for the maxillary nerve block.

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Abstract No: 1153
Sirolimus in lymphangioma of tongue and lymphangiogenesis as its predictive marker

Dr. Preeti Tiwari, Dr. Vaibhav Pandey, Dr. Shiv Prasad Sharma, Dr. Rakesh Kumar, Dr. Pranaya Panigrahi, Dr. Om Prakash Singh, Dr. Sashikant Patne

IMS, BHU

Abstract Background

Lymphangioma of the tongue is an extremely rare lymphatic malformation. Different treatment modalities have often been used with poor therapeutic outcome. Different studies and case reports have reported the successful use of sirolimus for the treatment of lymphangioma of the tongue. But the potential non-responders are unnecessarily exposed to the probable adverse effects. We hypothesize that lymphangiogenesis assessment can be used as a predictive marker for the response to sirolimus in lymphangioma tongue.

Aims

We performed this study with an aim to assess the role of sirolimus in lymphangioma of the tongue, and to evaluate the utility of lymphangiogenesis as its predictive marker.

Methods

A prospective study was conducted after ethical clearance. Following clinical and histological diagnosis of lymphangioma tongue, patients with lymphangioma of tongue were included in the study. Patients with any previous intervention within a period of 1 year were excluded from the study. Children were given sirolimus in a dose of 0.8 mg/day in three divided doses. Clinical response was assessed by two independent observers, using clinical photographs at an interval of four weeks. Lymphangiogenesis was assessed by lymphatic micro vessel density, which was calculated by immunohistochemistry using D2-40 as lymphatic endothelial marker.

Results

Sixteen patients with lymphangioma tongue were managed. Overall, 56.25% patients were excellent responders, 31.25% were partial responders, and 12.5% were non-responders. Mean LVD among excellent responders was 21.00 ± 3.74 whereas among non-responder it was 8.00 ± 4.24 . There was a significant difference in mean LVD between excellent responders, partial responders and non-responders (p-value 0.001).

Conclusion

Sirolimus is effective in children with lymphangioma tongue and lymphangiogenesis is a useful therapeutic predictive marker. This study opens a new area of research and for development of different predictive makers for treatment response of vascular anomalies.

Abstract No: 0011
PRF over PRP in extraction of impacted third molars

Dr. Saravana Kumar B, Dr. A. Julius, Dr. Raghavendra Jayesh

Sree Balaji Dental College & Hospital

Abstract

A wide range of intra and extra articular events & various signalling proteins mediate and regulate the healing process of both hard and soft tissues. Aim of the study: to compare clinically and radiologically the effects of platelet rich fibrin (prf) over platelet rich plasma (prp)

on alveolar bone repair following extraction of impacted third molars methods: a non randomised experimental study of 100 patients with bilateral completely impacted mandibular third molars were studied and their post operative pain scale, post operative swelling, mouth opening, soft tissue healing index and bone tissue healing index were compared for prf over prp. Results: in the study platelet rich fibrin was shown to have better healing properties compared to platelet rich plasma.

Abstract No: 0038
Comparison between pre-operative and post-operative administration of pain killers

Dr. G. Padmanabha Kumar

Mahsa University

Abstract

The main aim of the study was to compare between pre-operative and post-operative analgesics in post-operative pain in dental treatment, as pain is a common aftereffect following a dental treatment, especially extractions. The study was done to find out if taking analgesics prior to dental treatment will help in reducing post-treatment pain, as well as comparing the efficacies of three types of painkillers, paracetamol, ibuprofen, and mefenamic acid in pain relief. 120 volunteers who were undergoing extraction participated in the study, 60 participants given analgesics prior to treatment and the other half only prescribed post-operative analgesics. A visual scale was used to record pain level at intervals up to 56th hour post-operation. Results showed that patients taken analgesics pre-operatively experienced less pain post-operation as compared to the other group of subjects. When compared between the three medications, mefenamic acid cumulatively showed more patients experiencing lower levels of pain, followed by ibuprofen, and paracetamol at third place. We believe that the anti-inflammatory effects provided by the nsaid class of analgesics influenced this. Key words: pre-operative pain, post-operative pain, dental extraction, paracetamol, ibuprofen, mefenamic acid.

Abstract No: 0209
Revisiting autologous fat grafting in the maxillofacial arena: a study of 5 patients

Dr. Omkar Anand Shetye, Dr. Praveen Kumar, Dr. Rakshit Khadeparker, Dr. Saurabh Kamat, Dr. Purva Khandeparker, Dr. Rahul Kamat

Goa Dental College and Hospital

Abstract

Background

Autologous fat grafting has been a minimally invasive technique used for ages for both esthetic and reconstructive purposes as an ideal body filler. It is simple, inexpensive, surgeon-friendly and has the only disadvantage of variable fat resorption ranging from 40 to 80%. With more research in this field and improved techniques, the argument regarding longevity of fat grafting is becoming rare with an increase in predictability.

Aims and Objectives

This prospective clinical study is carried out to test the efficiency of autologous fat grafting in facial contour deformities arising from developmental and autoimmune disorders for esthetic and reconstructive purpose.

Methods

The present study was performed under local anaesthesia where fresh fat was harvested from the abdominal area and injected through a grafting cannula into the orofacial region. Fat atrophy due to advanced age were excluded. Hemifacial microsomia and patients with systemic lupus erythematosus were included in the study group. This study was performed between June and October 2017 with a follow up on 9 months. Abdominal harvested fat was left to sediment for 30 min, with all the blood/saline products being discarded and only pure fresh fat was used.

Results/Findings

The post-operative follow ups at 1 month, 3 months, 6 months and 9 months showed a drastic improvement in structural and cosmetic outcome, with more than 85% of initially grafted volume being stable and more than 95% patient satisfaction. We as oral and maxillofacial surgeons have a major role to play in the facial cosmetics. Autologous fat grafting should be the 1st choice in such cases. Through this presentation i would like to highlight this important subspeciality of oral and maxillofacial surgery which is a forgotten entity and needs to be revisited before it is too late.

Abstract No: 0243

Lipus Use in Maxillofacial Region

Dr. Himanshu Thukral, Raj Kumar Maurya, Virender Suhag

Army Dental Centre (Research & Referral)

Abstract

Among the great challenges facing clinical research in the use of ultrasound in maxillofacial pathologies and facial fractures, lipus (low intensity pulsed ultrasound) has evolved over years as an adjuvant therapy to the treatment protocol followed. Substantial part of maxillofacial surgery deals with maxillofacial bone healing. In 1950, maintz conducted first study showing positive stimulatory effects of ultrasound on bone healing. As per literature, ultrasound may be of value in the treatment of delayed unions, in callus formation after distraction and in treatment of osteoradionecrosis. Many studies documents that the lipus is beneficial for accelerating callus formation and for promoting fracture healing in compromised tissue beds. Ultrasound has proven to increase vascularity and should be used as an adjunct therapy in reconstructive procedures post radiation. Lipus device is quite handy and portable version of tus (therapeutic ultrasound) with significant advantages of low intensity. The low intensity is being used increasingly worldwide due to its bios stimulatory effect. The introduction of lipus can increase patient comfort by inducing early bone formation. This will help the patient to recover faster from disease. However, there have been few studies of lipus in maxillofacial region; further studies in this field would be better to evaluate the final clinical outcome of lipus. The aim of the presentation is to highlight the uses of lipus, principle of lipus and its advantages in treatment of maxillofacial pathologies like osteoradionecrosis and facial fractures.

Abstract No: 0257

Inferior alveolar nerve regeneration with bifocal distraction osteogenesis in dogs

Dr. Emiko Isomura, Yosuke Shogen, Kiyoko Nakagawa, Mikihiko Kogo

Osaka University, Graduate School of Dentistry

Abstract

Background

Bifocal distraction osteogenesis has been shown to be a reliable method for reconstructing segmental mandibular defects. However, there are few reports regarding the occurrence of inferior alveolar nerve regeneration during the process of distraction.

Objectives

We performed bifocal distraction osteogenesis procedure in 11 healthy adult male the beagle dogs (age 9–14 months, weight 8–11 kg).

Methods

Using a bifocal distraction osteogenesis method, we produced a 10-mm mandibular defect, including a nerve defect, in each dog and distracted using a transport disk at a rate of 1 mm/day. The regenerated inferior alveolar nerve was evaluated by histological examination, electrophysiologic analysis and retrograde transportation of horseradish peroxidase (hrp).

Findings and conclusion

On histological examination, although consecutive nerves were observed in all areas, cellular nerve fascicles were seen, consistent with wallerian degeneration at 3 and 6 months in the nerve connection area on the distal side of the transport disc. On electrophysiologic analysis, stable evoked potential measurements were obtained from the nerves at 6 months. At 3 and 6 months, hrp-labeled neurons were observed in the trigeminal ganglion. The number of hrp-labeled neurons in each section increased, while the cell body diameter of hrp-labeled neurons was reduced over time. We found that the inferior alveolar nerve after distraction osteogenesis successfully recovered until peripheral tissue began to function. Although our research is still at the stage of animal experiment, it is considered that it will be possible to apply this method in the future to humans who have the mandibular defects.

Abstract No: 0289

Review on metallic biomaterial in dental applications

Dr. S. Tharani Kumar, Dr.Krihika

Sathyabama Dental College

Abstract

Titanium and titanium compounds are broadly utilized for manufacture of dental inserts. On account of potential immunologic and conceivable stylish bargains with titanium inserts, novel embed advancements are being created. Nonetheless, these novel advancements must keep up the qualities that give titanium embeds their high achievement rates. The point of this investigation is to survey explore articles led on dental inserts materials, contrast them and dental inserts made of titanium just, with a specific end goal to give data on the ti-ga-si dental embed osseointegration and mechanical quality. The pubmed/medline, google-scholar, isi web of knowledge databases

were sought utilizing the catchphrases “dental implant alloys” and “dental implant materials”. An information extraction sheet (in light of the cochrane consumers and communication review group’s information extraction format). Indicators of dental embed achievement or disappointment were gathered from different articles distributed throughout the years January 2008 up to and including June 2018 and exhibited as content and tables. One fundamental indicators for embed achievement is the decision of compound decided for the embed. A combination of titanium with gallium and silicon is proposed to be brought into dental implantology in this examination after fruitful finish of the survey.

Abstract No: 0302

Evaluation of herbal preparation in management of oral submucous fibrosis

Prof. Singh Vibha, Dr Roop Ganguly

K.G.Medical University

Abstract

Oral sub mucous fibrosis is a chronic debilitating disease and a well recognised potentially premalignant condition of the oral cavity. Various medical and surgical modalities have been used but results are not satisfactory owing to recurrence, adverse effects and some worsening condition. Our study comprised of 30 patients attending the department of oral and maxillofacial surgery K.G. medical university Lucknow India it was open label randomized clinical trial 30 patients of clinically diagnosed cases of OSMF. Herbal preparation was made and given to the patients for oral rinse and gargle for 3–5 min twice a day for 4 months. Clinical evaluation was done every 15 days. Pre and post interventional evaluation of biochemical parameter, serum antioxidant, mda, sod and glutathione peroxidase was done, there was marked improvement in clinical as well as biochemical parameters.

Abstract No: 0304

Finite element analysis guided functional rehabilitation of jaws with dental implants

Dr. S. Shyam Sundar, Dr Sahith Kumar Shetty, Dr Manjula, Dr Ganesh

JSS Dental College and Hospital

Abstract

Background

The long-term success of functional rehabilitation of edentulous jaws with dental implants depends on various factors, including the stress distribution patterns generated around implants during loading, which in turn depends on the prosthetic design. Hence it can be presumed that the final prosthetic design has a significant role in the stress distribution pattern around the implants and hence important for long-term success of such functional rehabilitation. Finite element analysis (fea) objectively measures such stress patterns around implants.

Aim

Objectively analyse the stress distribution around dental implants after loading using fea.

Objective

To decrease the abnormal stress around implants by customising loading through corrections in prosthetic design.

Material and method

This study considers the patient requiring functional rehabilitation of maxilla secondary to maxillectomy. The patient after obtaining an informed consent, was functionally rehabilitated following the below sequence: 1. Dental implant insertion 2. Transitional prosthesis after healing 3. Cbct 4. Finite element model generation from cbct 5. Stress pattern analysis around implant for loads in all three axes (x, y, z) 6. Correction of abnormal loading points 7. Final prosthesis results and conclusion: the areas of abnormal stress distribution patterns vary according to the vector direction in all 3-dimensional planes. The prosthetic design does have an impact on stress distribution pattern around implant. Fea does play an important role in customising patient treatment by objectively analysing and correcting the loading pattern thus improving the stress distribution pattern. Hence, a comprehensive, multi-disciplinary, logical and evidence based customised treatment planning combining the field of medicine and engineering is an essential for long term success of functional rehabilitation of edentulous jaws with dental implants.

Abstract No: 0447

Laser (LLLT) therapy for impacted mandibular third molars postoperatively

Dr. Sailesh Kumar R

Meenakshi Cleft and Craniofacial Centre

Abstract

Purpose

To evaluate the effectiveness of llLt in the control of postoperative pain, swelling, and trismus associated with the surgical removal of impacted mandibular third molars.

Method

This prospective study was carried out with a sample size of 30. Patients were randomly divided into two groups of 15 each. Group 1(study/llLt group) consisted of patients undergoing llLt without the use of postoperative analgesics and antibiotics. Group 2 (control) included patients who were administered postoperative analgesics and antibiotics without the concurrent use of llLt. The predictor variable was low level laser therapy application following mandibular third molar impaction surgery. The outcome variables namely pain, swelling and trismus were evaluated on the day of surgery and on 1st, 3rd and 7th postoperative days. The data collected were computed.

Results

Pain, swelling, trismus were increased on pod 1 and gradually reduced by pod 7 in the study group when compared to the control group. Application of llLt to impacted mandibular third molar sockets showed statistically significant reduction in pain, swelling and trismus.

Conclusion

The results of the study suggest that application of llLt to impacted mandibular third molar sockets is helpful in eliminating/or reducing postoperative pain, swelling and trismus.

Abstract No: 0825**Maxillofacial surgery at crossroads: an armed forces perspective***Dr. (LT COL) Yuvraj Issar**Indian Army***Abstract**

Surgery is the first and the highest division of the healing art, pure in itself, perpetual in its applicability, a working product of heaven and sure of fame on earth” - sushruta samhita 500 bc. Oral surgery has a unique relationship with medicine and dentistry as it straddles both professions. Gradually, dentists who limited their practice to extractions and the attendant dentoalveolar surgery gained recognition for their skill as oral surgeons. The dual-degree general surgery-oms training program started in 1971 and in the early 1980s: concerns over oral surgeons being able to admit their own patients arose in the western countries however hospital bye-laws at that time prevented it. In the indian armed forces, omfs surgeons have been admitting their patients in service hospitals since the specialty was incorporated in the medical services setup. In spite of the vast progress made by the speciality, the general population as well medical practitioner colleagues are not fully aware of the scope and treatment horizon of the speciality. The armed forces dental services takes pride in being one of the first to start orthognathic surgery in mid 1990,s in India and pioneering maxillofacial distraction osteogenesis, at the armed forces medical college, pune. The vast exposure to war injuries and trauma management has only helped in traversing into wider horizons of airway management, cranioplasties, complex orbital injuries, distraction osteogenesis, orthognathic surgeries and interventions in the neck, often getting us at crossroads with various medical specialities. Future destabilizes the present, whereas the present resists the future, hence we must live in both the present and the future for the progressive growth of the profession.

Abstract No: 1154**Efficacy of autologous platelet-rich fibrin in osseous regeneration after mandibular third molar surgery***Dr. Praveen Peramulla**Kamineni Institute of Dental Sciences***Abstract**

The study was conducted to evaluate the efficacy of soft tissue healing and bone regeneration in mandibular third molar extraction sockets after placement of platelet-rich fibrin.split-mouth study was carried out in 15 patients requiring extraction of bilateral impacted mandibular third molars patients were divided into group i (test group) and ii (control group) of 15 sites in each. Results were compared within the parameters of postoperative pain, facial swelling, soft tissue healing and bone density. Radiological assessment of the extraction site was done. This study clearly indicates a definite improvement in the wound healing, decrease in postoperative edema, wound dehiscence, and increase in the bone density, which signifies. The purpose of the presentation is to highlight the use of Platelet rich fibrin (PRF) certainly as a valid method inducing hard tissue regeneration. The procedure of prf preparation is simple, cost-effective, and has demonstrated good results.

Abstract No: TR4698**Rapid prototyping - an innovative technique in reconstructive and esthetic maxillofacial surgical procedures***Prof. Manojkumar K. P**KMCT Dental College, Manassery, Kozhikode, Kerala***Abstract****Background**

Using medical models built with rapid prototyping (rp) technologies represents a new approach for surgical planning and simulation. These techniques allow one to reproduce anatomical objects as 3d physical models, which provides the surgeon a realistic impression of complex structures before a surgical intervention. Rp models are very well suited for use in diagnosis, treatment planning, performing virtual surgery, surgical guide preparation and construction of patient specific implants. Objective to illustrate the clinical accuracy and utility of rp technique and stereolithographic models in maxillofacial surgery we report 4 cases in which rp technology was used for treatment planning, virtual surgery, surgical guide/splint fabrication and patient specific implant (psi) tumour reconstructive surgery we report two cases of benign odontogenic tumors of mandible in which rapid prototyping technology was used for treatment planning,virtual surgery,fabrication of customized surgical operating guide(csog) and psi. The defects were lateral in one case and anterior segment of mandible in the other. Orthognathic surgery - we report 2 cases of mandibular prognathism with maxillary hypoplasia. Cone beam computed tomography (CBCT) of mandible &middle third of face as well as occlusal surface of diagnostic cast (0.5 mm slices in dicom format) was taken. Treatment planning, virtual orthognathic surgery and fabrication of surgical splint was done using rp technology. Lefort I advancement of maxilla was performed and fixation was done using intermediate splint as occlusal guide followed by bilateral sagittal split osteotomy of mandible whose fixation was done using final splint as guide. Conclusion simulation of maxillofacial surgery using rapid prototype model leads to reduced operating time, fewer surgical errors, more precise fit and high stability after fixation of custom-made implants.

Category – TMJ Disorders and Surgery**Abstract No: 0272****Comparison of subfascial and deep subfascial approach for TMJ ankylosis using hbfngs***Dr. Vijaylakshmi, Dr. Virendra Singh**SHKM Govt. Medical College, Nalhar, Nuh, Haryana***Abstract****Background**

Preservation of the functional integrity of the facial nerve (FN) is considered one of the critical measures of success in temporomandibular joint (TMJ) surgery. In spite of the development of a variety of surgical approaches to the TMJ, the FN remains at risk. The two most commonly used approaches are the subfascial approach (SA) and the deep subfascial approach (DSA). As per literature, the DSA provides an additional layer of protection (the deep layer of the

temporalis fascia and the superficial temporal fat pad) to the temporal and zygomatic branches of the FN and thus, is considered the safest method to avoid FN injury.

Objectives

To compare FN injury following TMJ surgery using SA or DSA and measuring it on House and Brackman facial nerve grading system (HBFNGS).

Methods

Fifty- six TMJs in 40 patients were operated for TMJ ankylosis, using either the subfascial approach, or the deep subfascial approach. The FN function was assessed post-operatively at 24 h, 1 week, 1 month, 3 month and 6 month intervals using HBFNGS.

Results

Of 56 surgical sites, 32 TMJs were operated using DSA and 24 TMJs were operated using SA. Both the approaches gave comparable results when assessed using HBFNGS after 6 months post-operatively. However, DSA gave better results in early post-operative phase.

Conclusion

The deep subfascial approach has a distinct advantage over the subfascial approach, especially in early post-operative phase. At 6 months post-operatively, however, results for both the approaches are comparable.

Abstract No: 0300

Surgical management for temporomandibular joint dysfunctions: a five years clinical experience

Dr. N. Mohan Rangan, Dr NK Sahoo, Dr PK Chattopadhyay, Dr SS Sambyal

Command Military Dental Center, Lucknow

Abstract

Background

Temporomandibular joint (TMJ) is the most dynamic structure in the maxillofacial region. The joint anatomy encompasses many vital structures that contribute its form and function. The joint performs complex movements with muscles, ligaments, bones and teeth of both the sides of face in an impeccable synchrony. Therefore any mismatch, injury, infection or altered anatomy for this joint leads to a catastrophe in normal function of the joint. This presentation is based on 5 years of clinical experience in managing TMJ dysfunctions surgically.

Methodology

The presentation is based on the surgical management of TMJ dysfunction at various tertiary service hospitals, performed by the maxillofacial surgical team. The data, collected between Jun 2013 and Jun 2018, was categorized based on the dysfunction and management. A total of 310 cases were surgically managed for various dysfunctions due to luxation, hypermobility, hypomobility, infection, systemic manifestation, tumour and trauma. The patients were reviewed at regular intervals and post op assessment was done for features like tenderness, mouth opening, jaw deviation and asymmetry, luxation, facial nerve function, graft uptake and masticatory efficiency. Post-op physiotherapy and complications are also discussed.

Conclusion

The choice of surgery in TMJ dysfunction is unavoidable in certain areas like ankylosis, chronic sub-luxation, trauma or tumours. But step ladder approach can be followed in most of the commonly reporting cases of TMJ dysfunction, which starts with conservative management, to physiotherapy, to minimally invasive techniques, to

open procedures. The follow up and post-op care are equally essential aspects of the management.

Abstract No: 0338

Guidelines for mandibular distraction osteogenesis in TMJ ankylosis patients

Dr. Sonal Anchlita

Govt. Dental College &Hospital, Ahmedabad

Abstract

Background

Since mandibular asymmetry presents with varying magnitude and morphology, it is difficult to establish one standard protocol for all deformities secondary to TMJ ankylosis (TMJA). Distraction osteogenesis (DO) has been used for such patients, but no specific guidelines have been laid for this.

Aim and objectives

A. To evaluate outcomes of uniplanar and biplanar distraction for severe mandibular deficiency and obstructive sleep apnea in TMJA.
B. To formulate guidelines regarding the type & site of distraction.

Methodology

This prospective, single centre study involved 24 patients of TMJA (12 each for uniplanar and biplanar distraction), with deficiency of mandibular ramus, corpus or both. Cephalometric analysis helped decide treatment, and splints prepared on 3D models helped during surgery. One osteotomy was done at the body for uniplanar and 2 osteotomies, at the ramus and body, for biplanar cases.

Results

Vast improvement with minimal complications occurred at average follow up of 2.8 years.

Conclusion

Guidelines for DO in TMJA patients are proposed, depending on body length, ramal height, AHI and MPA; with osteotomy site depending on position of teeth, lingula, mental foramen and size of intermediate segment.

Reference

- Ortakoglu et al (2007) DO in severe mandibular deficiency. *Head Face Med*

Abstract No: 0859

Efficacy of interposition of autogenous dermis fat graft in TMJ ankylosis

Dr. Sonal Priya Bhansali

RUHS CODS Jaipur

Abstract

Background

Various interposition materials have been suggested for surgical treatment of temporomandibular joint (TMJ) ankylosis. In this study, dermis fat is used with advantage that the fat graft itself may be replaced by adipogenesis from the surrounding connective bed, which explains the consistent presence of fat within the joint.

Aim and objectives

The aim of this study was to present the clinical and radiographic experience of using dermis-fat interpositional grafts in the surgical management of TMJ ankylosis patients.

Methods

22 patients (27 joints), who presented with TMJ ankylosis were included in the study. All patients underwent a TMJ gap arthroplasty and the resultant gap was filled with an autogenous dermis-fat graft, procured from an elliptical incision in the suprapubic area. All patients were followed up for clinical findings (occlusion, facial nerve paralysis, infection, mouth opening, mid line deviation) and MRI findings sequence protocol t1, stir axial, t1 and coronal, t2 sagittal in close and open mouth position) for a minimum of 2 years.

Results

Statistical analysis was done using computer software (spss 190 and ms office). Significance level for test was determined as 95% ($p < 0.5$).

Abstract No: 0863**Functional outcome following total alloplastic replacement of TMJ in ankylosis patients**

Dr. Suyash Dubey

All India Institute of Medical Sciences, Bhopal

Abstract**Background**

Temporo-mandibular joint (TMJ) replacement has been used clinically for years. Research in these last two decades has achieved important improvements in the development of biomaterials, design, adaptation, and fixation of the prosthesis components.

Objectives

To evaluate joint function and mouth opening after joint replacement.

Methods

We studied 5 patients, who had total TMJ unilateral or bilateral ankylosis. Replacement was done using custom-made alloplastic prosthesis after ankylosis release surgery. Three year follow up was done to evaluate mouth opening and joint function.

Results

Satisfactory joint function was observed with mouth opening following 3 years of follow up.

Conclusion

Total custom joint replacement is a reliable reconstructive method following TMJ ankylosis release.

Abstract No: 0878**Total joint reconstruction and concomitant orthognathic surgery in TMJ ankylosis: a pilot study**

Dr. Santosh Rao

All India Institute of Medical Sciences, Raipur

Abstract**Background**

Temporomandibular joint ankylosis is a debilitating disease that, despite surgical release with arthroplasty, leaves behind a great

amount of social and functional incapability to the patient. The patient undergoes multiple surgical procedures to attain what we call near normal results. We attempt to address the patient factors holistically, with concurrently addressing the TM joint and the facial deformity.

Methods

Patients diagnosed with TM joint ankylosis underwent comprehensive work-up comprising of a detailed history, photographs, study models, CT scans and cephalometric evaluation. A written informed consent was taken from each patient. The procedure planned included TM joint arthroplasty for joint release, with coronoidectomy, Bi-jaw orthognathic surgery, total TM joint replacement, and post-operative orthodontic treatment, which was begun as early as 2 weeks to utilize the rapid acceleratory phenomenon, aiding faster alignment. Patient satisfaction was evaluated using a questionnaire.

Conclusion

Total joint reconstruction and concomitant orthognathic surgery in TMJ ankylosis increases the functional and esthetic outcomes of the patient, and decreases the overall treatment time. However, the cost of the alloplastic joint is a major limiting factor in the outcome of the surgery.

Abstract No: 1056**TMJ ankylosis: need to shift treatment-only philosophy to prevention**

Dr. Nakul Uppal, Dr. Shalini Singhal, Dr. Snehanjali Jena

All India Institute of Medical Sciences, Raipur

Abstract

Ankylosis of the temporomandibular joint (TMJ) leads to debilitating deformity of the face and dentition, with psychological effects. Treatment can be difficult and extended for patients, with many requiring multiple surgeries. Alloplastic, autogenous and distraction modes of surgery each have specific drawbacks in overall restoration of form and function. Of the many known causes of TMJ ankylosis, trauma is the most frequent¹. The number of new cases of ankylosis seen in developing nations such as India justifies consideration of methods to prevent ankylosis of the TMJ after trauma is sustained. Public health campaigns have secured funds for interventions to prevent diabetes, hypertension and cardiovascular disease. Similarly, immunization campaigns receive publicity and funding for protection of neonates and children. TMJ ankylosis imposes a huge burden on patients and their families in terms of patients' health, psychosocial wellbeing, social acceptance, peer group, finances, marital success and career prospects. One disease with such similarly severe implications on patients is polio, the incidence of which has been greatly reduced by the effective national pulse polio campaigns. Similar publicity is seen in oral and dental pathologies such as oral cancer and dental caries. This paper outlines a proposed protocol for physiotherapy of the temporomandibular joint after trauma is sustained to the mandibular condyles in infancy and childhood. Strategies for awareness campaigns among laypersons, physicians, physiotherapists and nursing personnel are proposed. It is hoped that such an effort may reduce the burden of TMJ ankylosis on society, and spare more young people from its deforming and debilitating consequences.

Reference

1. Movahed R, Mercuri IG. Management of temporomandibular joint ankylosis. *Oral Maxillofacial Surg Clin N Am* 2015;27:27–35.

Abstract No: 0189
Effect of splint therapy on internal derangement of TMJ

Dr. Altaf Hussain Malik, Ajaz A Shah, Irshad Ahmad

Govt Dental College and Hospital Srinagar

Abstract
Introduction

The internal derangement of Temporomandibular joint (TMJ) is one of the commonest disorders of maxillofacial region where every treatment option from conservative means to minimally invasive or surgical modalities are exploited. Splints are one of the treatment options navigated since years. Objectives of the study: the study aimed at the effect of hard or soft splints on the diagnosed patients of internal derangement with reciprocal clicking.

Material and Methods

60 patients with 49 females and 11 males in the age group of 20 to 52 were included for the study after proper informed consent. The patients were randomized into two groups. In group a soft resilient 3 mm rubber splints (vaccum formed) were given and in group b transparent acrylic hard splint were given. The patients were followed for 4 months at monthly intervals. Both groups were followed for pain on vas scale, mouth opening, lateral movements, joint sounds, and the variables were compared with pre-splint therapy.

Results

Both the groups showed promising results on follow up. The maximum mouth opening increased in both groups however it was statically significant at 1 month period (p value).

Abstract No: 0207
The effect of temporomandibular joint discectomy with interpositional dermis fat graft on quality-of-life in severe internal derangement of the joint

Dr. Sudarshan V Bhat

Army Dental Centre R and R

Abstract

Purpose: the aim of this study was to compare the preoperative and 1 year postoperative clinical findings and to assess the quality-of-life of patients who had undergone temporomandibular joint discectomy with interpositional dermis fat graft in severe internal derangement of the joint. **Materials and methods:** this retrospective study involved 15 patients who had undergone Temporomandibular joint (TMJ) discectomy with an interpositional dermis-fat graft for the management of severe internal derangement. The age range of the patients was 18 to 39 years, with a mean age of 29.8 years at the time of their TMJ surgery. Preoperative and 1 year postoperative clinical parameters such as pain, maximum incisal opening (mio), diet and chewing of the mandible and general well being of the patient were recorded. **Results:** all of the 15 patients showed the improvement in mandibular mobility and function. There was a significant increase in the mio at 1 year follow-up. Pain levels at follow-up were significantly lower than the preoperative levels and there was significant improvement in masticatory efficiency and the general well being of the patient. **Conclusion:** the results of this study suggest that TMJ discectomy with dermis-fat grafting appears to have a positive effect on quality of

life in terms of reducing pain levels and improving masticatory efficiency and general well being in patients with severe TMJ internal derangement.

Abstract No: 0241
Third Vision in Temporomandibular disorders (TMD)

Dr. Murugan

Rajah Muthiah Dental College and Hospital

Abstract

Temporomandibular joint disorders is an umbrella term covering pain and dysfunction of the muscles of mastication and the temporomandibular joints. Temporomandibular disorders (TMD) is commonly associated with a triad of clicking, pain and dysfunction. TMD are mostly diagnosed by clinical examination and radiological examination. MRI and scintigraphy are utilized as additional diagnostic tools though advanced diagnostic tools are available a third vision is required for evaluating, diagnosing and for proper understanding of TMD. In this presentation I am going to elaborate this concept of third vision in TMD.

Abstract No: 0260
4DCT: A Novel Imaging Technique to Evaluate Condylar Movement

Dr. Masaya Akashi

Kobe University Graduate School of Medicine

Abstract

Temporomandibular joint osteoarthritis (TMJ-*oa*) is a disease of the bone, cartilage, and supporting tissues of the joint. Patients with advanced TMJ-*oa* often suffer from symptoms such as pain, swelling, joint dysfunction and sometimes required surgical intervention when conservative treatment is not effective. The etiology of TMJ-*oa* remains elusive. The usefulness of four-dimensional computed tomography (4D CT) in motion analyses of various joints has been recently reported. This article introduces a novel imaging technique of 4D CT which aims to identify kinematic features that may be associated with the etiology of TMJ-*oa*. In a 69-year-old female patient with severe TMJ-*oa*, 4D CT evaluation of the condylar movement was performed. During the scan, she was instructed to masticate cookie normally and her natural condylar movement during mastication was evaluated. The coronal 4D CT motion images revealed that the synovial cavity was narrower on the affected side than on the non-affected side. Repeated friction between the articular surface of the condyle and the caudal surface of the articular eminence was observed during natural mastication. Although friction between the condyle and the articular eminence has been considered as a factor in the initiation and progression of TMJ-*oa* in previous experimental studies using animals, this is the first study to directly visualize the friction between the atrophic and flattened condylar surface and the articular eminence. 4D CT is a novel imaging technique with the potential to assess kinematic features that cannot be visualized with other imaging modalities in patients with TMJ disease.

Abstract No: 0352
Management Protocol for Temporo mandibular disorders (TMD)

Dr. H. Rangarajan

Indian Army

Abstract
Background

Temporomandibular disorders (TMD) are a significant public health problem affecting approximately 5% to 12% of the population. TMD is the second most common musculoskeletal condition resulting in pain and disability. Pain-related TMD can impact the individual's daily activities, psychosocial functioning, and quality of life. Despite many years of both basic and clinical research in the field, clinicians continue to have difficulty in adequately managing many of the various temporomandibular disorders. This is due in part to the conflicting information and differing opinions found in the literature. This article reviews the literature and we give a protocol on step-by-step management of the patient with TMD in our day-to-day practice.

Objective

To derive a protocol for management of TMD in our day-to-day practice methodology: review of literature results: conservative or surgical management of TMD is decided based on the history, clinical and radiological examination. Both the methodology has its own merits and demerits, which the clinician has to weigh for that particular patient.

Conclusion

TMD is a multifactorial condition that has various etiologies. Initial treatment should always include conservative, reversible, and evidence-based modalities. Invasive therapies should be initiated only after noninvasive options have been exercised. Deriving a standard protocol is a necessary step toward the ultimate goal of developing mechanism- and etiology-based diagnostic criteria for TMD that will more accurately direct clinicians in providing personalized care for their patients.

References

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Abstract No: 0362
TMJ ankylosis as a sequelae to chronic suppurative otitis media

Dr. Vasudevan Kuppuswamy, Dr.A.P. Sampandan M.S., D.L.O

Sri Muthukumar Medical College Hospital and Research Institute Chennai-69

Abstract

Chronic otitis media is one of the common disorders of the childhood. It can cause extracranial and intracranial complications. In literature only a few cases of Temporo mandibular joint (TMJ) ankylosis in chronic suppurative otitis media have been reported. We present a

case of young girl aged 14 years who reported to our hospital ENT department with persistent chronic otitis media and inability to open the mouth. History of the patient has revealed the girl was suffering from csom for the past 5 years. She was treated for a number of complications due to csom at few medical centres in tamilnadu. On examination, the girl was suffering from post-aural fistula with discharge, external auditory canal stenosis and TMJ ankylosis on the same side. Patient was taken for external auditory canal repair and canal plasty by ENT surgeons and TMJ arthroplasty by oral and maxillofacial surgeon. It is important that the oral and maxillofacial surgeon has to be aware of the potential complication of spread of infection in this case, while planning for TMJ arthroplasty to prevent further morbidity.

References

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2. Craniofacial necrotizing fasciitis. An unusual complication of chronic suppurative otitis media. Sethi A, Sabherwal A, Puri R, Jain P. J. Laryngology 2006, Mar 120(3) e18.

Abstract No: 0970
Dautrey's procedure as an effective management for recurrent TMJ dislocation: report and review

Dr. Maj Shanender Singh Sambyal, Dr.(Maj Gen) NK Sahoo

Command Military Dental Centre (EC)

Abstract
Background

Temporomandibular joint (TMJ) dislocation is an involuntary forward movement of the mandible beyond the articular eminence with the condyle remaining stuck in the anterior-most position, leaving the patient unable to close their mouth. Various surgical methods have been described in literature for the management of TMJ dislocation in patients where conservative measure fail.

Aim/Objective

Here we present our experience of three cases of recurrent TMJ dislocation managed effectively using Dautrey's procedure with review of literature.

Methods

Three cases (one male and two females with mean age 23.3 years) of bilateral recurrent TMJ dislocation are described who presented to us with pain, clicking and jaw deviation on wide mouth opening in both joints. All the patients had history of manual reduction of lock jaw in the past and none was medically compromised. TMJ tomograms open mouth confirmed anterior dislocation of condyles beyond articular eminence in all patients. Total six Dautrey's procedures were performed. Miniplate fixation was done in one patient bilaterally. Two years follow up was done in all the patients.

Results

All the patients showed marked improvement in pain and TMJ function with no relapse at 2 years follow up. Post operative mouth opening became normal in all patients at 1 year follow up.

Conclusion

Dautrey's procedure serves as an effective management option for recurrent temporo- mandibular joint dislocation.

Keywords Temporomandibular joint (TMJ), Dautrey's procedure

References

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Abstract No: 0219

Iatrogenic condylar avulsion - viable options and dilemmas

Dr. Kathiravan Selvarasu

Abstract

Condylar fractures constitute almost 25% of mandibular fractures, which are treated by either conservative management or open reduction and internal fixation. Open reduction and internal fixation (orif) has been preferred over the conservative management due to: 1) increase in success rate and sophistication of treatment technologies, 2) owing to declining masticatory efficiency post conservative management. As with any surgery, increase in ORIF also involves increase in complications associated with it. One of the rare complications during orif of condylar fractures includes, iatrogenic avulsion of fractured condylar head. Although literature supports fixation of avulsed condylar head over discarding it, protocols regarding iatrogenic avulsion remains a controversy. This paper will discuss about case reports on iatrogenic condylar avulsion and management protocols followed in our unit and also, viable options as reported in literature and dilemmas associated with it.

Abstract No: 1239

TMJ Dysfunction- secondary to coronoid pseudohypertrophy, frequently diagnosed in UAE ethnic population

Dr. Palana Kulkarni

Al Qassimi Hospital, Sharjah, UAE

Abstract

The pathophysiology of the Temporo mandibular joint (TMJ) dysfunction is of multifactorial etiology (anatomical, physiological and psychological). The etiology which we frequently find in the UAE ethnic population has been significantly less often reported in other populations/races/geographical areas. Last year alone we had 27 patients referred to us with diagnosis of TMJ problem, who we later found to be cases of coronoid pseudohypertrophy. Majority of patients were female (22), the age group: 16- 40. All patients presented painful, restricted and curvilinear mouth opening, always associated with TMJ acoustics. Most of these patients, had impacted upper third molars. All patients had tender (often painful) coronoid and maxillary tuberosity. Panoramic radiographs and cone beam CT was done for all patients, however, only some had a radiologically evident hypertrophic coronoid. Our diagnosis of TMJ dysfunction in

these patients was the conflict between the coronoid and the maxillary tuberosity/zygoma. This conflict resulted in mechanical obstruction to normal mouth opening clinical picture typically seen in zygoma fractures. Our treatment modality involved two-step-approaches, depending on the severity of mechanical obstruction. First step was to extract the impacted upper third molar under local anesthesia, surgically reducing the volume of maxillary tuberosity. Satisfactory result has been achieved in 7 patients. The second step (coronoidectomy), was done only if the symptoms persisted after the extraction of the third molar. In all our patients normal, unrestricted mouth opening and no TMJ dysfunction/complaints have been achieved. We conclude, that among the UAE ethnic population one of the main causes of TMJ dysfunction is the conflict between the maxillary tuberosity/zygoma and the coronoid.

Abstract No: 0444

Determination of bone metabolic marker levels in perio-implant crevicular fluid and analysis of dental implants stability by resonance frequency in the early stage of healing in diabetic and non diabetic patients

Dr. Shweta Ashok

Meenakshi Ammal Dental College & Hospital, Chennai

Abstract

Aim & Objectives

The aim of the study is the early prediction of the stability of implants in diabetic and non-diabetic subjects by correlating with the study of biomarker assay such as alkaline phosphatase (alp) and receptor activator of nuclear factor kappa b ligand (rankl) in the peri implant crevicular fluid prior to the prosthetic loading of the implants.

Materials and Methods

A prospective study of 20 patients, 10 patients with a history of diabetes mellitus (hba1c < 8 under medication) and 10 patients clinically healthy, with single missing mandibular posterior teeth. The patients received endosteal root form implants. All the patients were subjected to peri implant crevicular fluid collection and resonance frequency analysis for implant stability measurements on day 1, day 30 and day 90 post implant placement.

Results

This study showed that all the implants placed in the diabetic group and non diabetic group attained stability and successful osseointegration as indicated by the biochemical assay and implant stability quotient. But the implants placed in the diabetic group required more critical monitoring and longer duration to complete the healing cascade. More importantly, maintaining the blood sugar levels under control during the post placement healing period is also vital for success of the procedure.

Conclusion

This study of biomarker assay in the peri implant crevicular fluid gives a scientific guideline to the predictability of implant uptake in diabetic and non-diabetic patients. The results of our study have further confirmed that diabetes mellitus with good to average glycemic control is not an absolute contraindication for dental implant placement. The rate of healing is prolonged in patients with diabetes compared to non diabetic patients which necessitates delayed loading of the implants with the prosthetic component.

Abstracts of Conference Proceedings – Prize Category Posters

Category – Cleft and Craniofacial Anomalies

Abstract No: 0314

Intrauterine repair of cleft lip & palate “the miracles of science”

Dr. Swati Sahu

New Horizon Dental College & Research Institute, Bilaspur (CG)

Abstract

In the last 40 years, great progress has been made toward a better understanding of many aspects of the cleft lip and palate defect, but there is still a long way to go, before there is agreement on the optimal treatment procedures. Surgical intervention is currently performed on highly selected fetuses with anatomical deformities that have a high mortality or severe morbidity when treated postnatally. In the future, in utero surgical intervention for non-life-threatening disease may become possible as fetal surgery becomes safer for the mother and fetus. Fetal cleft repair is an attractive intervention for plastic surgeons because it affords the potential to provide a scarless repair and correct the primary deformity. Furthermore, scarless fetal lip and palate repairs may prevent the ripple effect of postnatal scarring with its resultant secondary dentoalveolar and midface growth deformities. These potential benefits can dramatically reduce the number of postnatal reconstructive procedures in children with facial clefts.

References

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2. Molsted K. Treatment outcome in cleft lip and palate: issues and perspectives. *Critical Reviews in Oral Biology & Medicine*. 1999 APR;10(2):225–39.

Abstract No: 0534

Management of complex craniofacial clefts

Dr. Taher Abbas Mistry

MGM Dental College & Hospital

Abstract

Treatment of complex craniofacial clefts is an onerous task to repair for a surgeon. Moreover, due to the rarity of occurrences, there is lack of a standardised protocol for management of such patients. This e poster is based on the cases operated at our institute and will throw light on certain aspects of managing various forms of deformities associated with

craniofacial cleft. The deformities include orbital dystosis, hypertelorism, anophthalmia, lower eyelid coloboma and macrostomia.

Abstract No: 0553

Craniosynostosis

Dr. Abburi Sravanthi

Drs Sudha & Nageswara Rao Siddhartha Institute of Dental Sciences

Abstract

Craniosynostosis is a rare condition in which one or more of fibrous sutures fuse prematurely in infant skull, resulting in abnormal head shape and facial features. Features are determined by sutures which are closed and is associated with syndromes. Aetiology may be biomechanical, environmental, hormonal and genetic factors. Diagnosis is preferentially done in craniofacial centres. The preferred age for surgery is between 6 and 12 months. The primary goal of surgical intervention is to allow normal cranial vault development and to improve aesthetics and functional aspects.

Abstract No: 0565

Historical advancements in treating cleft lip and palate

Dr. Mahadeepa Kar, Dr N Srinath

Krishnadevaraya College of Dental Sciences, Bangalore

Abstract

Surgical correction is central to the current team-approached cleft treatment. Cleft surgeons are always concerned about the impact of their surgical manoeuvre on the growth of the maxilla. Hypoplastic maxilla, concaved mid-face and deformed dental arch have constantly been reported after cleft treatments. This poster mainly deals with various factors influencing maxillary growth like surgical approaches and the various aspects like pre-surgical intervention, the timing of cleft repair and alveolar repair, surgical design and treatment protocol in treating cleft lip and palate.

Abstract No: 0622

Subjective assessment of nasolabial appearance in cleft patients

Dr. Shibani Das, Dr. Krishnamurthy Bonanthaya (Professor)

Bangalore Institute of Dental Sciences

Abstract

Introduction

Cleft individuals are subjected to numerous surgeries from childhood to achieve an early and better outcome of both form and function.

However, achieving near ideal result remains challenging and difficult. Facial appearance remains one of the major tools for assessing the outcome of a successful cleft surgery. This study focuses on assessing the opinions of different individuals on the nasolabial appearance of cleft individuals.

Aims and Objectives

The current poster aims to assess subjectively the opinions of professionals and laypersons on the nasolabial appearance of unilateral cleft lip and palate patients treated with two different techniques of primary lip repair using the widely accepted Asher - McDade rating scale.

Materials and Methods

This is a retro-prospective study conducted at the Bhagwan Mahaveer Jain Hospital, Bengaluru. 70 patients randomly divided using a computer generated number system were assigned into group A and group B (group A - modified Millard technique group B - modified Millard + Philip Chen method of semi-open rhinoplasty). Photographs of the patients taken at a minimum of 6 months post the primary lip repair was assessed. Frontal and lateral (cleft side) views with only the interested area will be subjected for assessment with 2 groups of people comprising professionals and laypersons. The assessment was carried out using the popular Asher - McDade rating scale.

Results and Conclusions

Nasolabial appearance seems to be favourably rated for patients with no rhinoplasty among both professionals and laypersons concluding that no rhinoplasty at the time of primary lip repair offers better aesthetics when compared to rhinoplasty at the time of primary lip repair.

Abstract No: 0644

Use of nasal conformer in patients with cleft lip

Dr. Patel Akshar Tareshkumar

Narsinhbhai Patel Dental College and Hospital

Abstract

Background

Considerable improvements have been made over the past five decades in the management of cleft lip and palate deformities. However, the accompanying nasal deformities have received less attention.

Aim/objectives

To investigate clinical effects of preoperative nasolabial molding (NAM) & nasal conformer and their use in patients with cleft lip on the basis of their medical records and images.

Methods

All data and images of patients with cleft lip were retrieved from medical records. The extent of improvement in terms of columella height (CH), nostril width and nostril height were evaluated. Mann-Whitney U test was used to compare the non-normally distributed data. Spencer C. H. Kuo, Jui-Pin Lai, et al. used above mentioned methods in 16 patients with unilateral incomplete cleft lip in his study.

Results

Spencer C. H. Kuo, Jui-Pin Lai, et al. found in their study that patients in the nasolabial molding group and those in the nasal conformer group shows significantly improved preoperative cleft-side 'CH' ratio to normal-side 'CH' ratios compared with the corresponding ratios at birth.

Conclusion

Preoperative use of nasal conformers in patients with cleft lip not only corrects the deformed nasal cartilage but also increases the columellar

height and improves the overall preoperative nasal symmetry. In addition, compared with nasolabial molding, this method costs less. Use of nasal conformer is more straightforward than NAM, and requires fewer outpatient clinic visits.

Reference

1. Spencer C, Kuo H, Jui-Pin Lai et al (2018) Use of nasal conformer after birth effectively improves nostril symmetry in patients with unilateral incomplete cleft lip. *J Oral Maxillofac Surg* 1–6

Abstract No: 0661

Progressive hemifacial atrophy/Parry Romberg syndrome - a suggested treatment algorithm

Dr. Kavitha Arumugam, Dr. Vivek N, Dr. C. Saravanan, Dr. Karthik R

SRM Kattankulathur Dental College and Hospital

Abstract

Background/Introduction

Progressive hemifacial atrophy, also known as Parry-Romberg syndrome, is an uncommon degenerative condition characterized by a slow and progressive atrophy which is generally unilateral, of facial tissues including muscles, bones, and skin. More than being an aesthetic concern, it also brings several functional and psychological problems, when an asymmetrical face loses its identity.

Objective

To propose a treatment algorithm for reconstruction and for restoring esthetics and function in hemifacial atrophy. To test an alternative hypothesis with the aid of genetic engineering to assess whether the progress of this atrophy may be halted.

Method

The report of case series who originally reported with facial asymmetry was later diagnosed with hemifacial atrophy.

Results & Conclusions

A treatment algorithm based on the current evidenced literature as well as a possible hypothesis utilising genetic engineering will be presented.

Abstract No: 0666

Surgical repair techniques of microform cleft lip

Dr. Elvita Martis

A.J. Institute of Dental Sciences

Abstract

Microform cleft lip is a mild form of cleft lip, a rare condition with deficiency of the upper lip. It may be unilateral or bilateral. It is seen most commonly in boys on the left side of the lip. According to the *Malta Medical Journal*, the unilateral cleft lip is seen in 0.06 cases out of 10,000 live births. The bilateral type is much rarer. Most commonly seen features of a microform lip are- an indented free mucosal margin, a notched vermilion-cutaneous junction, a band of fibrous tissue running from the edge of lip to nostril floor, or a deformity of

the nostril on the side of the notch or band. Various combinations of these may be seen. Dentoalveolar abnormalities are often present with a microform cleft lip. The treatment objectives of surgical repair include- elimination of any notch of the vermillion, correcting the drooping or flattened ala, restoring muscle continuity with a minimal amount of scarring. Many different techniques are available for the surgical repair of microform cleft. From the traditional method of using upper lip external incision, to newer methods using trans/intraoral approach. One simple technique uses a primary vermillion v-y advancement followed by Millard rotation advancement technique. Another method uses a v-shaped flap method. Another surgical procedure for correction of microform cleft is a two small z-flap approach. A modified technique using muscle overlapping with a minimal skin incision is also available.

Abstract No: 0691

“The Big Fat Solution” – In Cleft Palate

Dr. Parimala Paravastu

Panineeya Institute of Dental Sciences

Abstract

Cleft lip and palate are the most common congenital deformities of head and neck. The sequelae of cleft palate are feeding difficulties, speech problems, hearing loss, mid facial growth impairment, dental and orthodontic problems. The primary goal of cleft care is to optimize function and appearance while minimizing surgical interventions and complications. Cleft surgeons are constantly challenged by transverse width restriction of maxillary arch and palatal fistulas after surgery. Conventional palate repair generally involves paring of margins of the cleft and mobilizing the tissue for approximation in midline to achieve closure. Large unlined, denuded palatal shelves serve as a key nidus of scar contraction as the palatal tissues attempt to fill dead space. The use of buccal fat pad (bfp) graft to cover palatal osseous defects and to prevent or repair fistulas has gained popularity in recent years. Bfp has been used for reconstruction of maxillary defects induced after tumor resection was first reported in 1977 by egyedi. Most published studies have reported a high success rate among bfp procedures due to its rich vascularity, proximity to recipient site, low donor site morbidity and simple surgical procedure for grafting. The bfp can be packed to cover both sides of the cleft palate releasing incision, where it forms epithelia, prevents formation of scar tissue, promotes wound healing and reduces the force formed by tension generated during wound healing, providing satisfactory conditions for normal growth of maxilla. In this poster we demonstrate case reports where we used bfp as an adjunct to cleft palate surgery and achieved good results.

Reference

1. Grobe A, Eichhorn W, Hanken H, Precht C et al. The use of buccal fat pad as a pedicled graft in cleft palate surgery. *International Journal of Oral and Maxillofacial Surgery* 2011;40(7):685–9.

Abstract No: 0775

Role of early mandibular distraction in severe form of pierre robin sequence

Dr. Sarita Mahajan

Ganga Hospital

Abstract

Role of early mandibular distraction in severe form of pierre robin sequence, previously known as the pierre robin syndrome, is characterized by the sequence of clinical events that result from a small mandible. The tongue becomes posteriorly displaced (glossoptosis) and obstructs the airway. The obstructing tongue also makes oral feeding difficult and, in severe cases, impossible. Early treatment is important for such children in order to prevent impaired cognitive development resulting from hypoxemic episodes. Various procedures aimed at widening the pharyngeal space have been proposed, including prone position, tongue-lip adhesion, mandibular traction, non-invasive ventilation and palatal plates. Mandibular distraction addresses primary problem, provides definitive correction of both airway obstruction and micrognathia. It also helps to avoid the ongoing maintenance, medical care, high cost and high risk of mortality associated with tracheostomy. Relief of airway obstruction by mandibular distraction osteogenesis leads to improvement of feeding and improvement in symptoms of upper airway obstruction secondary to micrognathia.

Conclusion

In addition to its positive effect on facial appearance, mandibular distraction osteogenesis is an effective procedure for the treatment of airway obstruction associated. We recommend early mandibular distraction in severe form of pierre robin sequence.

Abstract No: 0796

Cleft lip - a case report

Dr. Deepti Diwakar

Sree Balaji Dental College and Hospital

Abstract

Cleft lip occurs due to disturbances in the fusion of the various prominences involved in the normal developmental process involved in the formation of lip, nose and palate. The history of cleft lip and palate care have been closely related to dentistry and oral and maxillofacial surgery. This poster is a case report of a pediatric patient aged 2 years and 3 months with a tesser 7 cleft lip abnormality and its surgical management. The purpose of this report is to create a better understanding of the management of a rare cleft abnormality.

Abstract No: 1008
Comparison between furrow's versus buccal myomucosal flap in secondary cleft palate defect

*Dr. Sherman Edward Gomes, Dr.Krishnamurthy Dr.Preetham Shetty
 Dr.Aparna Dr.Prachi*

Bangalore Institute of Dental Sciences and Hospital

Abstract
Background

Velopharyngeal dysfunction (vpd) is considered to be a major cause for speech impairment in individuals with repaired cleft palate. This study gives the preliminary results of a prospective randomized study to establish the efficacy of the two surgical techniques in correcting post palatoplasty secondary vpd.

Aim

To compare the two surgical techniques in correcting post palatoplasty secondary vpd.

Objectives

To evaluate the perceptual speech outcomes and the velopharyngeal function using videofluoroscopic findings after both the techniques.

Materials and methods

30 individuals with repaired cleft lip and palate in the age range of 6–25 years were included in the study. All the individuals were evaluated for vpd through individual speech assessment and lateral view video fluoroscopy (VFS) after both the techniques.

Results

Furrow procedure gave better results of correction of velopharyngeal insufficiency along with speech results in comparison to buccal myomucosal flap (BMMF) procedure.

Conclusion

The results show that there was significant positive difference in VFS parameter and speech parameters post operatively in furrow palatoplasty while post operatively results in individual undergone BMMF did not show a significant change in most of the parameters.

Abstract No: 1010
Velopharyngeal function and speech characteristics in early cleft palate repair

Dr. Rahul Raghavender J, Dr.Krishnamurthy Dr.Aparna

Bangalore Institute of Dental Sciences and Hospital

Abstract

Velopharyngeal function and speech characteristics in children following early cleft palate repair: preliminary results.

Background

Optimum velopharyngeal function and normal speech outcome in children with repaired cleft palate depends on various factors like the technique used, the surgeon's experience and also the timing of palatal repair. Though perceptual speech assessment usually helps in determining the efficacy of primary palate repair, direct observation of the structure and function of velum gives information which helps in refining further palatal repairs.

Aim

To investigate speech characteristics and velopharyngeal function in children following early cleft repair.

Abstract No: 1022
Modified nasopharyngeal tube for airway management in pierre robin sequence

Dr. Philip Chaudhari, Dr.Sonal Anchlia, Dr.Zaki, Dr.Nisha Garg

Govt. Dental College & Hospital, Ahmedabad

Abstract

Background introduction

Pierre Robin sequence (prs) occurs in approximately 1 in 8500 babies. It is characterised by a cleft palate, micrognathia or retrognathia and glossoptosis. Backward displacement of the tongue causes airway obstruction. According to current best practice, the most effective method for temporary relief of the upper airway obstruction due to glossoptosis is the insertion of a modified nasopharyngeal tube (npt).

Objectives

To prove the efficacy of a modified npt in neonates with prs, to relieve upper airway obstruction, thus proving the overkill of the use of tongue lip adhesion and mandibular distraction in neonates.

Methodology

10 patients with prs were selected in the Department of Oral & Maxillofacial Surgery, Government Dental College & Hospital, Ahmedabad. Data collected included the degree of airway obstruction, method of airway management and long term follow up.

Results

Successful improvement in maintaining spo₂ with the npt was noted in all cases. None of the prs children required tracheostomy. Clinical improvement was noted in their weight, height, head circumference and decrease in chest indrawing, use of accessory muscles of respiration and tachypnoea. The average duration of npt use was 3 months. There were no npt related complications. Improvement in Silverman and Dawne scores were noted.

Conclusion

This method is safe because it is less invasive and its effects can be easily evaluated. Normal growth occurred as airway compromise resolved without immediate surgical intervention.

Abstract No: 1029
Evaluation of secondary alveolar bone grafts in cleft patients

Dr. V S Kumar Bhagavathula

Narayana Dental College

Abstract

Evaluation of secondary alveolar bone grafts in cleft patients.

Abstract No: 1077**Different treatment modalities to treat a cleft maxillary hypoplasia***Dr. Devmane Aditi Satish**Bangalore Institute of Dental Sciences***Abstract**

Maxillary hypoplasia is the most commonly encountered secondary deformity as a result of cleft lip and palate with a reported incidence of about 15–50%. There are two possible reasons, firstly that the cleft maxilla intrinsic potential of growth is less due to the developmental deficiency. Secondly, the iatrogenic factor created due to the surgical repair of cleft lip and palate causes scarring which inhibits the normal growth of the maxilla. To treat a cleft maxillary hypoplasia, it needs a combined intervention of orthodontics and a maxillofacial surgery team. Treatment modalities include non-surgical treatment and surgical treatment. The non surgical treatment makes the use of facemasks, headgear, external devices, tooth borne internal devices; whereas the surgical treatment includes conventional Le Fort I osteotomy procedure to achieve growth advancement & distraction osteogenesis(do) such as anterior maxillary distraction(amd), total maxillary distraction(TMD) to achieve greater advancement. These are used in combination of internal distraction devices such as quad helix which needs to be activated at proper interval of time. One of the reason for maxillary hypoplasia is pseudo- prognathism which can be treated with additional bi-jaw surgeries such as bilateral sagittal split osteotomy(BSSO). There are different treatment modalities available to treat a cleft maxillary hypoplasia. The treatment plan (surgical/non-surgical/combined) is up to the surgeons discretion depending on the patients requirements, keeping in mind factors like velopharyngeal incompetence & its deleterious effect on speech.

Abstract No: 1142**Utility of maxillomandibular distraction in post TMJ ankylotic deformities: a case report***Dr. Bagisha Kathuria**Maulana Azad Institute of Dental Sciences***Abstract****Introduction**

TMJ ankylosis is a debilitating disease characterized by progressive restriction of mouth opening and maxilla mandibular deformities.

Case Description

A case of 20 years old female with post ankylotic facial deformity is presented where maxillomandibular distraction was used to correct gross asymmetry and occlusal cant with vectors in both in horizontal and vertical directions. During course of followup, the applied distraction devices resulted in remarkable advancement of mandible; symmetrical facial profile aesthetic smile line; levelled occlusal plane and correction of deviation.

Conclusion

It is thus important to conclude that maxilla mandibular distraction can be effectively used in rectification of post ankylotic deformities.

Category – Craniomaxillofacial Trauma**Abstract No: 0137****Four leaf clover fixation - case of left blowout fracture management***Dr. Vipul Varma**Sri Ramachandra Dental College, Chennai***Abstract****Introduction**

Orbital floor blowout fracture is a common traumatic lesion of the craniofacial complex, but rarely in children population, consequently representing challenge in surgical treatment. Patients usually are seen with periorbital oedema and restricted eye movements with or without changes in vision.

Timely diagnosis and surgical treatment prevent the probability of the occurrence of the functional complications. The reconstruction of defects in the orbital floor after fractures poses a challenge because besides the patients aesthetic and reconstructive expectations, possible functional complications such as diplopia and facial paresthesia must be treated.

Case Report

This e-poster reports a case of 7 year old boy with an alleged history of fall from stairs at home after which he was brought to our emergency centre and after further examination and investigations was diagnosed with left orbital floor fracture, for which he was treated successfully by floor exploration and reconstruction using autogenous graft.

Conclusion

Pediatric orbital fractures occur in discreet patterns based on the characteristic developmental anatomy of the craniofacial skeleton at the time of injury.

Although uncommon in children, orbital fractures can be devastating to both vision and appearance. Meticulous physical examination techniques, coupled with the previously outlined treatment principles, will allow the surgeon to achieve successful outcomes in the management of these injuries.

Abstract No: 0153**Think Out of Glenoid Fossa***Dr. S. S. Sudharsan, Prof. G. V. V. Giri M.D.S**Sri Ramachandra Dental College, Chennai***Abstract****Introduction**

Condylar fractures constitute about 29% of fractures of mandible. The most common cause of condylar fractures being Road traffic accident (RTA) and the age group affected are young adults.

Traumatic dislocation of condyle out of glenoid fossa is relatively rare.

Case Report

A 18 year old male patient reported to our OMFS opd with a history of RTA one week back and patient complaints of pain in right and left side of face.

On further examination and investigation patient was diagnosed with panfacial fracture.

This patient presented with rare presentation of anteromedial dislocation of condyle into infratemporal region which has lead to fracture of zygomatic arch. This poster talks about management of this traumatic dislocation of condyle.

Abstract No: 0169

Evaluation of new design titanium miniplate in management of angle fracture of mandible

Dr. Rozina Sultnbhai Vishnani

Bharati Vidyapeeth Dental College and Hospital Sangli

Abstract

Introduction

In 2014, a new design titanium plates were introduced by B.T Suer et al. The plate has one straight section and two lateral extensions. The straight section of the plate is 4 holed and is adapted to superior oblique ridge, two lateral extensions with one hole each which are bent and adapted to buccal cortex of the ascending ramus.

Discussion

An in vitro study has been conducted using new design titanium miniplates in dry hemi mandibles of sheep. Findings demonstrated that the new design titanium miniplate offer more resistance and stability to the lateral displacing forces at the fracture site compared to conventional miniplate. This poster we will be discussing our study in patients to compare the efficacy of new design titanium miniplate with four hole conventional titanium miniplate for management of angle fracture of mandible.

References

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Abstract No: 0174

Comparing six and two four hole plates in angle fractures

Dr. Anish Poorna T, Dr Muhammad Ali Thayyullathil MDS, Dr S Mohan Prof and HOD

Government Dental College, Kottayam

Abstract

Introduction

Aim

Is to compare biomechanical behavior a single six hole curved plate with two four hole plate in the repair of mandibular angle fracture in goat.

Methods

It is an invitro study done on goat hemimandibles. To simulate the angle fracture, 20 goat hemimandibles were sectioned in the mandibular angle region in a uniform manner with a saw from retro molar region on a line that connected to the angle of the mandible and fixed with two different plating.

Techniques

Two four hole 2 mm mini plate one at superior boarder and one at inferior boarder (group 1), and one 2 mm six-hole curved mini plate using champy's technique (mini plate at superior boarder) (group 2).

All the hemimandibles were subjected to compression testing in a universal testing machine. A 2 mm displacement point was defined as the end point, and the loads that created this magnitude of displacement were measured on the displacement charts.

Results

Showed that two four hole plate fixation have more favorable biomechanical behavior than the single curved six hole plate fixation.

Abstract No: 0188

Accessory nerve blocks: unveiling the ambiguities

Dr. Joshna E K, Dr. Dibin MDS, Dr. S Mohan Professor and HOD

Govt. Dental College, Kottayam

Abstract

Introduction

Adequate anesthesia has been a critical component for pain management in maxillofacial surgery. Due to the various down sides of general anesthesia.

Regional or local anesthesia is preferred whenever general anesthesia is not mandatory. Literature review suggests that an extra oral technique to anesthetize the maxillary nerve via suprazygomatic approach is more safe and efficacious. The superficial cervical plexus block is one of the frequently used regional anesthetic technique in various surgeries.

Aims and Objectives

To assess the effectiveness and safety of the accessory nerve blocks in the oral and maxillofacial surgical practice and to assess any associated complications related.

Materials and Method

Extra oral suprazygomatic maxillary nerve block was administered in 50 patients for reduction of isolated zygomatic arch fracture and superficial cervical block along with inferior alveolar nerve block given in 50 patients for ORIF in the management of mandibular body fractures.

Onset, Peak Effect Of Anesthesia, Outcome Of Treatment, Complication And Pain During The Procedures Were Noted.

Results

The accessory nerve blocks were effective with majority of patients who reported only mild pain during the elevation of zygomatic arch fractures and reduction and fixation of mandibular body fractures favouring the efficacy of suprazygomatic block and combined superficial cervical plexus and inferior alveolar nerve block.

Conclusion

The present study has favoured the suprazygomatic nerve block and superficial cervical plexus nerve block as a simple safe efficacious method associated with minimum complication.

References

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Abstract No: 0297

Single exposure for reduction and fixation of zygomatic fractures

Dr. Narayan Taradevi Puthan Veetil, Dr. Vikas Dhupar

Goa Dental College

Abstract

Aim

To evaluate the efficacy of the preseptal transconjunctival approach with a modification of cutaneous extension, for management of zygomatic complex fractures.

Materials and Methods

A total of 15 patients were included in the study after taking a written informed consent for the same. The study included the cases of zygomatic complex fractures. Patients were selected randomly irrespective of their age, sex, caste or religion.

Result

The surgical time taken from incision to exposure of the fracture site ranged from 17 to 22 min with an average of 19 min. Complication rate for this study was about 6.67% which included a case of conjunctival granuloma. In all patients, aesthetics of this approach was acceptable to both the patient and surgeon.

Conclusion

The preseptal transconjunctival approach with a modification of cutaneous extension provides exposure to: infra orbital rim, lateral wall of orbit and lower medial wall of orbit. This incision has an acceptable aesthetics and minimum complications.

Abstract No: 0378

Advances in bioresorbable plate system

Dr. Pushpjot Sadana, Dr. Tejinder Kaur, Dr. Amneet Kaur, Dr. Jasmine Kaur

Shri Guru Ram Das Institute of Dental Sciences and Research

Abstract.

Introduction

Maxillofacial osteosynthetic surgeries require stable fixation for uneventful bony healing and optimal remodelling.

Materials & Methodology

Titanium plates and screws are considered gold standard for the fixation in maxillofacial surgeries, but the use of bioresorbable plates and screws are emerging in various maxillofacial surgeries like orthognathic surgery, maxillofacial fractures and reconstructive surgery.

Discussion

Constituents of bioresorbable plates include polyhydroxyl acids: polymers and copolymers of plla (poly-L- lactic acid), poly-D-lactic acid, polyglycolic acid and polydioxanone sulphate.

The advantages of using titanium miniplate include its strength, ease of handling, lack of dimensional changes, minimal scatter on computed tomography scanning and compatibility with radiography.

Contrary to titanium miniplates, bioresorbable plates do not cause corrosion and accumulation of metal in tissues, and there is no need to remove hardware after osseous healing, no toxicity and mutagenic effects. Nonetheless, there are some problems related to bioresorbable materials such as inflammatory response, rapid loss of initial implant strength, higher refraction rates, inadequate stiffness of the implants and weakness compared to metallic implants.

Although the use of bioresorbable plate system is associated with a few disadvantages, but significant advances in the improvement of its properties pertaining to biocompatibility, mechanical potential and osteoconductive characteristics, has aroused their widespread adoption as implant material in the field of oral and maxillofacial surgeries.

References

1. Overview of innovative advances in bioresorbable plate systems for oral and maxillofacial surgery.
2. Comparison of the long-term clinical performance of a biodegradable and a titanium fixation system in maxillofacial surgery: a multicenter randomized controlled trial.

Abstract No: 0382

Approaching a traumatised condyle. A decade long retrospective analysis

Dr. Namitha Mysore Hiriyanna, Dr. Shyam Sundar, Dr. D. Saikrishna

JSS Dental College, Mysuru

Abstract

Introduction

There are different approaches to the condyle which have evolved over time varying upon requirements for each scenario. Its imperative to compare approaches to predict best outcomes.

Objective

To compare outcomes of preauricular and rhytidectomy approaches with that of retromandibular and mini-retromandibular approach.

Method

Patients treated at dept of oral-maxillofacial surgery, JSS dental college, Mysore between 2008 and 2018, with condylar fractures and who underwent ORIF were considered.

Based on approaches taken by the surgeon, 77 patients were divided into two groups. Group 1 - preauricular or rhytidectomy approach was used. Group 2 - retromandibular or mini-retromandibular approach was used. Following parameters were compared: surgical access, anatomic reduction, scar formation and complications of infection, sialocele, hematoma, auricular paresthesia and facial nerve weakness.

Results

We found that group 1 achieved excellent access (35%) with anatomically correct to good reduction in 75% of the cases. In comparison, group 2 achieved excellent access (40%) with anatomically correct to good reduction in 71% of the cases. Ratio for incidence of conspicuous scars was group 1: group 2::3:16. 39%

complications were noticed in group 1 in comparison with 24% in group 2.

Conclusions

There is significant lower incidence of complications in retro-mandibular and mini-retromandibular approach. Fracture reduction opportunities are similar to that of preauricular and rhytidectomy approach, and thus it can be preferred over the latter.

References

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Abstract No: 0405

Management of frontal sinus fractures

Dr. Dani Mihir Tusharbhay, Dr Mohan Baliga

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Abstract

Introduction

Management of frontal sinus fractures (fsf) has been the subject of great debate for more than six decades. Frontal sinus fractures account for 5–15% of overall maxillofacial injuries. Multiple treatment options and algorithms have been proposed by multiple specialities throughout the years.

Aim

To highlight the varied surgical management of frontal sinus fracture and to ascertain its advantages and disadvantages.

Discussion

The optimal method of frontal sinus repair is yet to be elucidated. Because of the location of the frontal sinus and its proximity to numerous intracranial structures, inadequate treatment may lead to life-threatening intracranial infectious complications.

Frontal sinus injuries may range from isolated anterior table fractures resulting in a simple aesthetic deformity to complex fractures involving the frontal recess, orbits, skull base, and intracranial contents.

Management of frontal sinus fractures remains highly controversial that the indications, timing, a method of repair, and surveillance remain disputable among the surgeons. The goals of the treatment of frontal sinus injuries are to provide an aesthetic outcome, restore function, and prevent complications.

Results

Successful surgical management of such frontal sinus fractures had been executed.

Conclusion

It is critical to have a comprehensive understanding of frontal sinus anatomy. Accurate imaging and thorough physical assessment of the frontal sinus fractures are necessary for successful treatment planning.

Various treatment modalities range from a conservative approach to interventional approaches such as reconstruction, osteoneogenesis, obliteration, cranialization, and ablation.

Abstract No: 0458

3-D plates in the treatment of mandibular fractures

Dr. Hani Yousuf Naik

I.T.S Dental College

Abstract

Introduction

The management of trauma has evolved from various forms of splinting, circum-mandibular wiring, extra-oral pins, semi rigid fixation and trans-osseous wiring. The currently used conventional miniplates technique require maxillomandibular fixation for a short period of time and are unable to provide three dimensional stability to the fracture site. The three dimensional plating system is based on the principle of obtaining support through geometric stabilization in the three-dimensions of the fracture site since it offers a good resistance against torque forces.

Research Aims and Objectives

To evaluate the treatment outcome and post operative complications in mandibular fractures using 3 dimensional titanium miniplates.

Methods

Patients for the study purpose are selected from those reporting to the department of oral and maxillofacial surgery, I.T.S dental college, Greater Noida.

Patients who are clinically and radiologically diagnosed as a case of fracture mandible are included in the study.

Result

During the course of the study, the 3-d plates were found to be standard in profile, strong yet malleable, facilitating stabilization and reduction at both the superior and inferior borders giving three dimensional stability to the fracture site.

Conclusion

The 3-D plating system may be considered a viable option for treating mandibular fractures as it provides the following advantages: 1) minimal tissue dissection near the osteotomy and fracture line 2) fixation point remains in vicinity of osteotomy line. 3) blood supply to the fragments is not disturbed.

References

1. Three dimensional titanium mini plates in management of mandibular fractures. Balakrishnan et al., Biomed. & Pharmacol. J., vol. 7(1), 241–246 (2014).
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Abstract No: 0475

Treatment of condylar fracture-open or closed?

Dr. Jyoti Kiran

Buddha Institute of Dental Sciences & Hospital Patna

Abstract

Introduction

Mandibular fractures are extremely common in facial trauma, out of which 25–35% involve condyle.

Condylar fractures are classified according to anatomic location (intracapsular and extracapsular) and degree of dislocation of articular head.

Aims/Objectives

To know the outcome of open versus closed treatment of condylar fractures.

Methods

Two cases of condylar fracture, one treated by closed reduction and another treated by open reduction and internal fixation, were observed in this study result two cases were compared, and on the basis of esthetic and ease of operation.

Discussion

The management of condylar fractures is divided into: 1. Nonsurgical (closed reduction) 2. Surgical (open reduction). Many researchers recommend closed reduction because of problems of surgical approach, such as infection, injury of nerve and blood vessel, and scar formation. However, it is still controversial over the selection of either closed or open reduction to treat condyle fracture depending on displacement severity and fracture site.

Open reduction should be conducted if fractured mandibular condyle is severely displaced, and that closed reduction may be conducted considering various factors such as elderly or pediatric patients, difficulty in the conduct of open reduction under systemic anesthesia, no other facial fracture, and secured stability of occlusion.

Results

Closed reduction was found to be better than open reduction.

Conclusion

Management of condylar fractures remains a source of ongoing controversy. The goals of treatment include restoration of function and esthetics. In order to avoid varieties of complications that may arise, it is important to follow these patients closely and provide appropriate treatment based upon clinical situation.

The role of condyle as an articulation unit and growth center must be taken into account for the successful management of these injuries.

Abstract No: 0506

Tissue response to stainless steel and titanium plates used in maxillofacial trauma - a transmission electron study

Dr. Nikhila G

Dayananda Sagar College of Dental Sciences

Abstract

Introduction

Stainless steel and titanium plates have been used over a period of years in maxillofacial surgery for the internal fixation of facial fractures. Titanium fixative hardware have tremendous advantage over stainless steel hardware.

Aim & Objectives

This poster displays observation about stainless steel and titanium plates and long term usage of hardware and its effect on surrounding soft tissue.

Discussion

Titanium mini plates are biocompatible and the necessity to remove the implants were not considered but recent studies have shown the presence of titanium in the tissues, in and around the implant region.

Growing concern of adverse effects of reactions of corrosion products of implanted devices is now a clinical dilemma of whether to remove the plates and screws used for fixation in maxillofacial trauma after healing or not.

Results

Studies have shown that there is presence of marked inflammation and tissue reaction in soft tissue covering titanium and stainless steel plates used for internal fixation.

Conclusion

The study provides information about tissue reaction to stainless steel and titanium plates that were used for the treatment of facial fractures. Since they are known to exhibit fretting in the presence of surface oriented micro motion at low magnitude mechanical stresses and some metals particulates would be expected in the region of associated with plate applications.

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2. Dugal A, Thakur G. Surface analysis of indigenous stainless steel miniplates used in facial fractures. *Journal of Maxillofacial & Oral Surgery*. 2010;9(4):403–406. <https://doi.org/10.1007/s12663-010-0094-8>.

Abstract No: 0514

Evaluation of titanium mandibular angle plate in management of mandibular angle fractures

Dr. Surya Kiran Thotharamudi

St Joseph Dental College & Hospital

Abstract

Introduction

Mandibular angle is one of the most common sites for mandibular fractures. Due to changes in line of calcification and strength it is considered as one of the most common reason for fracture in mandibular angle.

Angle fractures are rarely treated by maxillo-mandibular fixation alone and so open reduction and internal fixation should be performed.

Discussion

Even with advancements in methods of internal fixation, management of these fractures is still controversial due to varying anatomical and biomechanical considerations. Even though extraoral approach is required for placement of angle plate, it is a good first option when more rigid or semi rigid fixation is required, and the best fallback when the Champy technique is ineffective.

This poster highlights the management of mandibular angle fracture by open reduction and internal fixation with titanium mandibular angle plate.

Abstract No: 0529**Coronal Incision: Its Advantage***Dr. Prathamesh Vasant Bhujbal**Dr. D. Y. Patil Dental College Pimpri, Pune***Abstract****Introduction**

The coronal incision a single versatile surgical approach to the upper and middle regions of the facial fractures.

It provides excellent access to the areas with minimal complications. A advantage is the most of surgical scar is hidden within the hairline.

Aims

To study the versatility of coronal incisions for treating fronto-naso-orbito- ethmoidal fractures and evaluate the advantages, indications and complications associated with it.

Method

In this case study, a patient was treated by a coronal approach. A step by step guide makes this method a simple one to perform.

Results

This poster attempts to remove the fear from coronal incisions and help young surgeons to deliver quality surgery.

Conclusion

The coronal incision provides excellent access to the fronto-naso-orbito - ethmoidal fractures, aiding in good anatomical reduction and also has added advantages of the scar hidden in the hairline.

Abstract No: 0552**Use of transconjunctival approach in reducing zygomaticomaxillary complex fractures***Dr. Girish Talreja**RUHS College of Dental Sciences***Abstract****Introduction**

Fracture of the zygomaticomaxillary complex (ZMC) is one of the most common facial injuries. Because of the intimate relationship of the zygoma with numerous other structures of the face, stable reduction of ZMC fractures is paramount to restoring pre injury function and esthetics.

The increasing emphasis on the open reduction and internal fixation of zygomaticomaxillary complex fractures has led to a more critical appraisal of the various surgical approaches to the orbital and zygomatic skeleton.

Discussion

Transconjunctival approach popularized by tessier although credited to bourquet in 1924 offer excellent exposure of the orbitozygomaticomaxillary complex fracture especially the infra-orbital rim, frontozygomatic suture and the orbital floor. The argument against a transconjunctival access focuses primarily on concern about limited exposure that apparently makes accurate reduction and osteosynthesis of displaced fracture fragments difficult or impossible.

Also, due to close association with eye and various ocular complications reported in the literature, most of the surgeons feel skeptical about using this approach.superior esthetic results and direct

simultaneous access to the orbital rim, orbital floor and lateral orbital wall, support the use of the transconjunctival approach as a frontline approach to access the zygomaticomaxillary complex.

Abstract No: 0568**Condylar post-fracture syndrome following mandibular angle fractures - a clinical study***Dr. Swetha.T, Dr. Elavenil. P, Dr. V. B. Krishnakumar Raja**SRM Dental College Ramapuram***Abstract****Introduction**

Fractures of the mandibular angle result in numerous complications such as mal occlusion, asymmetry, paresthesia etc.

However, internal derangement of the contralateral temporomandibular joint is less known. The phenomenon of indirect injury to the contralateral joint is termed condylar post fracture syndrome.

Aims & Objectives

This paper discusses the prospective clinical study performed to assess the development of internal derangement of Temporomandibular joint (TMJ) following angle fractures and management of such patients.

Method

The approval for the study was obtained from the institutional review board and conducted in accordance with helsinki guidelines. 40 patients with angle fractures were divided into study and control groups. The study group received post-operative splint therapy.

Result

Demonstrated high incidence of TMJ dysfunction of varying grades in patients with mandibular angle fracture and splints play an effective role in preventing development of TMJ dysfunction.

Abstract No: 0569**Predictors for clinical outcome in orbital floor and medial wall fracture***Dr. Anurag Basak**Bapuji Dental College and Hospital***Abstract****Introduction**

Reconstruction of orbital wall is a challenging and demanding task. True to original accuracy of reconstruction has long been helmed as the essential factor in clinical outcome.

However detailed analysis of other factors influencing postoperative clinical outcome such as plate positioning, surface contour, implant material, influence of soft tissue and orbital volume preservation has not been extensively looked into.

Discussion

Previous studies by various authors found that the size of the fracture area, the volume of herniated orbital tissue, and the number of walls involved affect the postoperative outcome. Other studies showed computer based volume measurements from ct helped in correlation with the degree of enophthalmos.

Results

The data acquired from various studies suggest that the influence of accurate mechanical reconstruction on the clinical outcome may be less predictable than previously believed and the role of soft tissue related factors may have been underestimated.

Abstract No: 0574**Cicatricial entropion correction using lower labial mucosal grafting**

Dr. Janani, Dr Jagadish V

Saveetha Dental College

Abstract**Introduction**

Cicatricial entropion refers to inversion of lower eyelid margins. This can result in trichiasis, where the eyelashes are directed posteriorly toward the globe which can cause corneal and conjunctival damage leading to corneal abrasions, scarring, corneal thinning, or corneal neovascularization.

It is encountered as a complication of trans-conjunctival approach in orbital floor fracture reconstruction, as a result of conjunctival contracture and internal rotation of eyelid margin.

Case Presentation

We herein report the case of 27-year old man with a blowout fracture of orbital floor. Computed tomography showed a pure blowout fracture of the left orbital floor fracture.

As a surgical intervention, orbital floor reconstruction was done using a titanium mesh through trans-conjunctival approach. The patient developed left lower eyelid entropion as a postoperative complication due to scar contracture.

Result

Surgical management of entropion was done through scar excision and replacement of tissue deficiency using lower labial mucosal graft was made successful.

Abstract No: 0580**orbital floor fracture: finding the ledge**

Dr. Arya Arun, Dr. C. Saravanan, Dr. N. Vivek

SRM Kattankulathur Dental College and Hospital

Abstract**Introduction**

Orbit is a unique, complex area where multiple important and delicate anatomic structures are contained within a small space.

The thin orbital floor fractures are common in facial and orbital trauma. Though numerous techniques and materials exist for the repair of this region for reconstruction, the most important fact that extend of graft material and consideration of posterior limit play an

crucial role in restoring the orbital anatomy and preventing post-operative complications.

Aim

To determine the relevance of extend of the graft material and finding the posterior ledge in patients with orbital floor fracture.

Materials and Methods

All the patients reported in our trauma centre diagnosed and treated for the orbital floor fracture have been included in our study from the year of 2015 to 2018. With the help of 3D computed tomography (CT) and the anatomic landmark, the posterior ledge - orbital process of the palatine bone was identified and measured with sagittal bony landmarks of orbit. Also the extend and positioning of the graft/implant materials were measured.

Results

Post-operative outcome analysed and compared with patients clinical and radiological investigation results.

Conclusion

With the obtained results we arrived into a conclusion that identifying the anatomical landmarks and obtaining the measurements pre-operatively in an orbital trauma can enable a safer and more precise reconstruction of orbital floor. Also helps the surgeon to avoid the post-operative complications like downward cantilevered position of the graft material, subsequently causing volume increase, potential enophthalmus, and entrapment of herniated soft tissue, resulting in diplopia.

Keywords Orbital trauma, computed tomography, orbital floor fracture.

Abstract No: 0600**CAD/CAM splints in ORIF of mandibular angle fractures - case report**

Dr. R. Mrunalini, Dr. Elavenil P, Dr. V. B. Krishnakumar Raja

SRM Dental College and Hospital, Ramapuram

Abstract**Introduction**

Angle fractures are frequently encountered among mandibular fractures as they constitute an area of weakness. Complications after open reduction and internal fixation (ORIF) commonly arises due to improper reduction and fixation methods.

Aims & Objectives

This poster highlights taking digital impression using an intraoral scanner and fabricating computer aided designing/computer aided manufacturing (CAD/CAM) generated splints which facilitates restoration of occlusion and ORIF of mandibular angle fractures.

Results

Various techniques have been advocated to achieve restoration of occlusion and anatomic reduction of the fractures that are associated with many limitations.

The advantages of this technique include easy reduction and fixation, less operative time and accuracy in anatomical reduction.

Abstract No: 0631

Intraoral versus extraoral approach for mandibular angle fracture

Dr. Anik Sarkar

Buddha Institute of Dental Sciences and Hospital

Abstract

Introduction

Fractures of mandibular angle represents the largest percentage for among all mandibular fractures responsible for almost 33% of all mandibular fractures. There are two different approaches for treating this condition:intraoral and extraoral approach.

Intraoral indication

Intraoral approach usually used in fracture that are non displaced or only slightly displaced.

Advantage

This requires shorter operating time. Esthetically it is more desirable. Have fewer chance of nerve damage.

Disadvantage

It can cause mild infection. It can lead to slight malocclusion.

Extraoral indication

Extraoral approach is usually necessary with fractures that have high degree of dislocation since locating longer and stronger plates are difficult via intraoral approach.

Advantage

Ease of accessibility & visibility of the fractured site.

Disadvantage

This surgical procedure is usually lengthy. Prolonged ga may be bothersome. Esthetically it is undesirable. Threat remains for vitality of marginal mandibular branch of facial nerve.

Conclusion

Both approaches has its own advantages and disadvantages. We select approaches according to favourability and dislocation of fractured fragments.

Abstract No: 0645

The management of eyelid trauma - an overview

Dr. Thenaravi M

Thai Mogambigai Dental College and Hospital

Abstract

Introduction

Eyelid trauma can vary from minor soft tissue laceration to complex tissue loss, along with bony fractures.

Aim

To re-establish the anatomic structure as much as possible. Once the assessment of the injury is done the treatment planning varies according to the severity of the injury and each case will have a custom/tailor made treatment option to prevent the complication and functional disability possible.

So a brief overview of eyelid injuries and their best treatment protocols are presented in this poster.

References

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2. Skyes JM et al (1994) Evaluation and management of eyelid trauma. Facial Plastic Surg

Abstract No: 0652

Pediatric Mandibular Fracture

Dr. Kisana Dhanraj Tadas

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Abstract

Introduction

Management of pediatric mandibular fractures presents a unique challenge to surgeons in terms of its numerous variations compared to adults. Both conservative and open methods have been advocated with their obvious limitations and complications.

However conservative modalities may not be possible in grossly displaced fractures, which necessitate the open method of fixation.

Aims

To restore the mandibular continuity after fracture reduction, not only for immediate function but also for future craniofacial development.

Methods

Fracture was treated conservatively with custom-made open cap splint with circum-mandibular wiring.

Results

Satisfactory restorability of mandibular continuity achieved. This method is simple and can be mastered easily with uneventful post-operative healing and high patient compliance.

Conclusion

This technique enables realignment and stable positioning of the displaced fractured segments.

It is also prompt, effective, secure, and does not interfere with the developing tooth buds.

Abstract No: 0679

Retromandibular approach for subcondylar fractures

Dr. Jitendra Kumar Diwakar

Institute of Dental Sciences, Bareilly

Abstract

Introduction

Among the fractures of mandible, condylar fractures are very common. As explained in the literature there are various approaches to the condyle.

The treatment of extra-capsular fractures is controversial. While extraoral approaches have different advantages, there are various disadvantages also. While treating high condylar fractures, preauricular approach is most commonly used. Whereas, while treating low condylar fractures and exposure of the angle, preauricular approach has its own limitations.

To overcome such limitations retromandibular approach has greater advantages as working distance from the skin incisions to the condyle becomes shorter.

Recently this approach is studied more and has become a preferred approach for many oral and maxillofacial surgeons all over the world.

Aim

To evaluate the efficacy and safety of the retromandibular approach in the management of condylar fractures by open reduction and internal fixation.

Materials and Methods

Our patient received a retromandibular transparotid approach to identify and stabilize the condylar fracture site.

Results

The length of the skin incision was suitable to raise a wide flap and provide adequate exposure in all cases, including medially dislocated condylar fractures. Successful fracture reduction & fixation was revealed in postoperative radiological examination.

Conclusions

The retromandibular approach provides adequate exposure of the subcondylar region and should be considered as an excellent alternative in the management of condylar fractures.

References

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Abstract No: 0741

IMF Made Easy-IMF Screws

Dr. A.M.Shakeel, PROF.Dr.Srivatsa

Thai Moogambigai Dental College

Abstract

Introduction

Inter-maxillary fixation (IMF) screws are inserted into the bony base of both jaws in the process of fracture realignment and immobilisation.

Methods

The screw heads act as anchor points to fasten wire loops or rubber bands connecting the mandible to the maxilla. Traditional interdental chain-linked wiring or arch bar techniques provide the anchorage by attached cleats, hooks, or eyelets.

Discussion

In comparison to these tooth-borne appliances imf screws facilitate and shorten the way to achieve intermaxillary fixation considerably,

in addition, imf screws help to reduce the hazards of glove perforation and wire stick injuries. On the downside, imf screws are attributed with the risk of tooth root damage and a lack of versatility beyond the pure maintenance of occlusion such as stabilizing loose teeth or splinting fragments of the alveolar process.

Results

The surgical technique of imf screws as well as the pros and cons of the clinical application are reviewed. Screws are less time consuming and are effective with less tissue damage.

Conclusion

The adequate screw placement to prevent serious tooth root injuries is still an issue to rethink and modify conceptual guidelines.

Abstract no: 0764

Management of frontal sinus injuries-retrospective review of 15 cases

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Indira Gandhi Institute of Dental Science

Introduction

Frontal bone of skull comprises of frontal sinus with an anterior and posterior wall along with an outflow tract. Its fractures are relatively uncommon, making up only 5–12% of all facial fractures because of its protected location by prominence formed by nasal pyramid.

When it occurs, rehabilitation of fracture complex without jeopardizing proximal vital organs is challenging. Injuries of frontal bone may range from simple isolated anterior wall fractures to complex fractures predominantly associated with maxillofacial injuries.

Treatment of frontal sinus injuries is controversial in relation to indications, timings and method of repair.

Discussion

The following poster reports an overview of fracture patterns and surgical approaches for 15 patients who were treated in our institution from 2010 to 2015. All of whom have common etiology of road traffic accident in which most of them showed associated fractures of zygomatic complex, naso-ethmoid, orbital injuries and of mandible. They also showed displaced or undisplaced anterior table wall and comminuted fracture of anterior and posterior table.

Management includes conservative method to sinus obliteration, miniplates and mesh placement. With neurosurgical consultations we conservatively managed patients with cranioencephalic complications. Post operatively, all patients were monitored periodically and showed no abnormalities.

We achieved satisfactory aesthetic contour at those sites without complications during follow-ups. Thus concluding that decision making regarding the best time to treat, surgical approach and technique depends on the severity and the extent of fracture and associated complications. If there is involvement of posterior wall, neurosurgical consultation and decision to operate depends upon the associated complications.

References

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Abstract No: 0766
Management of condylar fractures open reduction versus closed reduction

Dr. A. Prasanth

Thai Moogambigai Dental College

Abstract

Introduction

In the treatment of mandibular condyle fracture, conservative treatment using closed reduction or surgical treatment using open reduction can be used.

Aims & Objective

The objective of this review was to evaluate the main variables that determine the choice of an open or closed method for treatment of condylar fractures, identifying their indications, advantages, and disadvantages, and to appraise the current evidence regarding the effectiveness of interventions that are used in the management of fractures of the mandibular condyle.

Discussion

Management of mandibular condylar fractures remains a source of ongoing controversy in oral and maxillofacial trauma. For each type of condylar fracture, the treatment method must be chosen taking into consideration the presence of teeth, fracture height, patient's adaptation, patient's masticatory system, disturbance of occlusal function, and deviation of the mandible.

In the past, closed reduction with concomitant active physical therapy conducted after intermaxillary fixation during the recovery period had been mainly used, but in recent years, open treatment of condylar fractures with rigid internal fixation has become more common.

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Abstract No: 0786
Trigemino cardiac reflex; importance of neuronal interconnections - a clinical study

Dr. Sreeya Shankari R.K., Dr. Elavenil Paneerselvam, Dr. Krishna kumar Raja V. B

SRM Dental College, Ramapuram, Chennai

Abstract

Introduction

Trigemino cardio reflex (TCR) is a sudden physiological response due to stimulation of the largest cranial nerve, the trigeminal nerve.

TCR is a triad of bradycardia, bradypnea and gastric motility changes due to the efferent activation of the vagal nerve in response to the stimulation of the sensory root of the trigeminal nerve.

TCR was originally called oculo cardiac reflex (OCR) and this terminology was changed because the response is not only limited to ophthalmic branch but for the entire trigeminal nerve.

Objective

This is a clinical study done to elicit tcr during surgical manipulation of craniofacial structures during fracture reduction of orbit, zygoma, maxilla and mandible and to analyze the various modalities of management and prevention.

Materials and Methods

Parameters assessed were heart rate, respiratory rate and blood pressure before surgical manipulation, at the time of fracture reduction and after reduction. The samples taken include

Category 1: 20 cases of fracture reduction involving orbit and frontal bone.

Category 2: 40 cases of fracture reduction involving maxilla and zygoma.

Category 3: 40 cases of fracture reduction involving mandible.

Results

The results of the study reveals that more TCR was elicited during zygoma fracture reduction.

Conclusion

Maxillofacial surgeons should be familiar with TCR to combat with sudden physiological response which may be even fatal at times. During surgery involving the maxillofacial region, tcr is to be anticipated which requires co ordinated management with anaesthesiologist.

Abstract No: 0791
Orbital floor reconstruction treatment modalities

Dr. Suraj Pramodbhai Parmar, Dr Abhay Datarkar (Professor & HOD) Dr Bhavana Valvi (PG student)

Government Dental College and Hospital, Nagpur

Abstract

Introduction

Isolated orbital floor fracture accounts for 4 to 16%. Fracture that extend outside the orbit are included such as those of the zygomatic complex and naso orbito ethmoidal (NOE).

This accounts for 30 to 55% of all facial fractures. These fractures create cosmetic deformities and visual impairments. Reconstruction of such defect is mandatory according to the type of orbital injury and it is divided into functional & cosmetic categories.

Objectives

1) to correct the cosmetic deformities such as enophthalmos or diplopia due to a bony orbital volume increase, extrusion of intraconal fat into extraconal spaces or prolapse of orbital contents into the maxillary sinus or ethmoid air cells.

2) to regain the functional activity including eye movements. Materials & methods- this was a retrospective study. We enrolled 15 patients from all age group reported to our institution from January 2016 to June 2018 of orbital floor fracture having enophthalmos or hypo-ophthalmos result from a bony orbital volume increase, extrusion of intraconal fat into extraconal spaces or prolapse of orbital contents into the maxillary sinus or ethmoid air cells.

Most commonly the subciliary incisions were used and orbital floor reconstruction was done using titanium mesh, titanium miniplate and autogenous bone grafts according to the type of orbital injuries.

Results

Our findings confirm that orbital floor reconstruction is a versatile technique which gives satisfactory results like improvement in aesthetics and functional improvement.

Conclusion

Orbital floor reconstruction is mandatory in all the cases and treatment modalities varies according to the type of injury and severity. Orbital floor reconstruction gives satisfactory result.

Abstract No: 0814**Negligence in Management of Condylar Fractures**

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Head of the Department*

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Abstract

Condylar and subcondylar fractures constitute 26–40% of all mandibular fractures. Given the unique property of mandible and temporomandibular joint, these fractures can result in marked pain, dysfunction and deformity if not recognized and treated appropriately.

Discussion

The most commonly involved complications include restricted mandibular movements, deviation of mandible, malocclusion, pathological changes in the TMJ, osteonecrosis, facial asymmetry and ankylosis irrespective of whether treatment was performed or not.

Thus, the treatment of condylar fractures has generated a great deal of discussion and controversy in oral and maxillofacial trauma and there are many methods to treat this. Closed treatment with maxillomandibular fixation was practiced earlier due to difficulties in surgical access to the condylar area and in repositioning the proximal fragment.

Analysis

It is adopted more frequently, since it permits early mobilization and adequate functional stimulation of condylar growth and bone remodeling. It is indicated in almost all condylar fractures that occur in childhood. In contrast, open treatment of condylar fractures with rigid internal fixation has become more common in recent years probably because of the introduction of plate and screw fixation devices that allow stabilization. It is indicated primarily for adults with displaced fractures or with dislocation of the condylar head.

Conclusion

Open reduction in children has recently been more accepted, mainly due to the development, confidence and greater experience of professionals with internal rigid fixation materials.

Basic and important considerations should be made before the choice of treatment is decided. This poster presents cases which throws light on the treatment aspects, indications, contraindications, advantages and disadvantages with respect to condylar injuries and emphasizes the importance of open reduction and rigid internal fixation.

Abstract No: 0827**Evaluation of intra ocular pressure in zygomatico maxillary complex fractures**

Dr. Akhilesh Kumar Pandey

Goa Dental College and Hospital

Abstract**Aims and Objectives**

To compare the intraocular pressure post zygomatico maxillary fracture reduction.

Materials and Methods

Intra ocular pressure (IOPS) of 15 patients with unilateral displaced zygomatico-maxillary complex (ZMC) fractures were measured with non contact tonometer at various time intervals.

The relationship of IOPS between pre and post ZMC reduction at various time intervals (pre-op, immediate post-op, after 7 days) was recorded and evaluated using independent t-tests.

Result

The iops of pre and post ZMC reduction was compared at various time intervals and was found to be significant. Also, a significant increase in iop was noted just after fracture reduction, which could be attributed to oculocardiac reflex, which has been proven to cause bradycardia, and in some cases, even death.

Conclusion

One needs to watch for iop while reducing ZMC fractures at regular intervals and the anaesthetist has to be informed to look for any bradycardia that can occur. Tonometers should be a part of standard armamentarium while reducing and fixing ZMC fractures.

Abstract No: 0833**Submental intubation in patient with pan facial trauma**

Dr. Kirthika R

Sree Balaji Dental College and Hospital

Abstract**Introduction****Aims and Objectives**

The aim is to perform submental intubation, while staying clear of the surgical field with minimal bleeding and minimal scar formation.

Methods

Medical records of 5 patients who had surgical reduction of midfacial or panfacial fractures while securing their airway with submental intubation were studied.

Materials

Flexometallic endotracheal tube (no.7/8) bp blade (no.15) bp handle blunt dissection scissors curved heavy artery, straight mosquito artery forceps, curved mosquito artery forceps, needle holder, suture needle and material (3–0 silk).

Results

Mean duration of surgery was 4 h. The intraoral and submental accesses healed with minimal scarring in all patients. Submental

orotracheal intubation is a useful and safe technique for airway management of craniomaxillofacial traumas.

Conclusion

Submental intubation for a complex maxillofacial fracture is a simple technique and the time required for the maxillomandibular fixation was very minimum.

Abstract No: 0834

Comparison of the treatment modalities of unilateral condyle fracture

Dr. Vijay Aravind

Sree Balaji Dental College

Abstract

Introduction

The incidence of maxillofacial trauma is increasing day by day. Mandible bone fracture is the tenth most common fracture in the human body and second to be injured of facial bones next to nasal bones.

Discussion

The unilateral fracture of condyle occurs frequently than bilateral. On comparison closed reduction proved to be adequate to treat undisplaced or minimally displaced fractures with no derangement of occlusion and open reduction for displaced or dislocated fractures.

Abstract No: 0855

Orbital trauma: diagnoses ignored in maxillofacial surgeries

Dr. Pooja Chandrashekhar Sulgante

H.K.E'S S. Nijlingappa Dental College Gulbarga

Abstract

Introduction

Orbital fracture is often missed out when they occur concomitantly with other facial bone fractures.

Any suspicion regarding vision with maxillofacial trauma both an ophthalmologist be consulted.

Discussion

Orbital fracture merits specific clinical attention for a number of reasons, failure to recognize and treat them may result in severe sequelae, which must be prevented.

However, despite surgical intervention, an orbital fracture is associated with risk of sensibility disorder, enophthalmos, diplopia, blindness, blurred vision, exophthalmos. diagnosis most fully reflect the status of the injury & provide all the information.

CT imaging remains the gold standard for detecting and defining orbital fractures in both coronal and sagittal view can be used to access the orbital soft tissue and evaluate for fat herniation or ocular muscle entrapment.

The aim of this poster is to stress on the need for the training of the oral and maxillofacial surgeon in orbital fracture and also to make a consensus to create awareness amongst the interdisciplinary branches for the diagnoses and treatment for the better outcome.

Abstract No: 0856

Mandibular condyle fracture: open versus closed - a treatment dilemma

Dr. Aniket Narayan Kakade

Terna Dental College & Hospital

Abstract

Introduction

The incidence of mandible fractures in the condylar region is high. The most common cause of mandibular condyle fracture is a road traffic accident.

Discussion

The clinical features of the mandibular condylar fracture includes malocclusion, open bite, swelling, tenderness over the joint, loss of mandibular function, deviation of chin, crepitus and laceration of the skin.

Treatment options for mandibular condylar fractures vary from open reduction to closed reduction. There is still a debate regarding the management of condylar fractures in adults when there is evidence of displacement, dislocation, or diacapitular fractures.

In this poster we reviewed & discussed the open versus closed reduction of condylar fractures with respect to postoperative outcome and complications in order to resolute the controversy of the treatment options.

Abstract No: 0864

Treatment of Condylar Fractures

Dr. Tanu Chauhan

M.M.C.D.S.R., Mullana

Abstract

Introduction

Mandible is a prominent facial bone and frequently gets fractured in facial trauma, 19–52% of which involve the condyle.

Condyles are not load bearing structures and are most vulnerable at the neck region. Fractures of condyle occur due to direct or indirect blows to facial skeleton, ex: falls, road side accidents and assaults.

Classical clinical features of condylar fracture are: unilateral-premature posterior occlusal contacts ipsilaterally with posterior open bite contralaterally; bilateral- anterior open bite.

Other clinical features are: laceration or bruise on chin, pre auricular pain, edema, midline deviation, shortening of height of ramus, limited mandibular movements, facial asymmetry, extrusion of dentition and loss of teeth. Radiographic diagnosis can be made by townes view and orthopantomogram.

Discussion

Condylar fractures are classified comprehensively by Indahl(1977) based on fracture level, relation of condyle to mandible and relation of condylar head to fossa.

The topic of treatment of condylar fractures has generated many controversies. The basic principle for treatment is appropriate and anatomic reconstruction of tooth bearing portion of jaw i.e. restoration of normal occlusion and function.

There are three types of treatments: conservative, functional and surgical. There are absolute and relative indications for surgical treatment (zide and kent, 1983), but, the choice of treatment depends

on age and desire of patient, position of condyle, fracture location, associated injuries, medical condition and cosmetic impact of surgery.

Treatment modalities are intermaxillary fixation, splints, open reduction internal fixation, subcondylar osteotomy, transosseous wiring, bone pins, kirshner wire and endoscopy guided reduction, all followed by physiotherapy. Complications of treatment include ankylosis, disturbance of growth pattern, jaw deviation, infection, malocclusion, facial nerve and external auditory canal injury, occlusion of internal carotid artery, non union, hemorrhage and avascular necrosis of condylar head.

Abstract No: 0899
Symblepharon: an unusual complication of transconjunctival incision

Dr. Sandeep Vaidya

HPGDC Shimla

Abstract Introduction

To present and discuss the unusual complication occurs postoperatively after transconjunctival incision.

Materials & Methods

The medical record of 3 patient, treated for orbitozygomaticomaxillary complex in the period of may 2016 to June 2018 presented with complication, symblepharon. Symblepharon refers to adhesion either partial or complete, of the palpebral conjunctiva of the eyelid to the bulbar conjunctiva of eyeball.

Symblepharon results in ocular motility restrictions, diplopia, incomplete eyelid closure and entropion with secondary deleterious effects on the ocular surface including the cornea.

Conclusion

A variety of approaches have been tried for the successful management of chronic symblepharon. Amniotic membrane transplantation effective in both promoting re-epithelialization suppresses inflammation and inhibits fibroblastic activation. In our cases we separated the adhesion and prevented by manually moving smooth glass rod at the junction of palpebral and bulbar conjunctiva. In case of acute/traumatic conjunctival damage, symblepharon can be prevented if the raw epithelial surface are separated until re-epithelialization occurs. Symblepharon are easier to prevent than to treat.

Abstract No: 0915
Locking miniplates in the management of mandibular fractures

Dr. Stiti Pragnya, Dr Sobhan Mishra, Dr Subrat Padhiary

Institute of Dental Sciences, Bhubaneshwar

Abstract Introduction

Mandibular fractures are common facial injuries accounting for 36 to 59% of all maxillofacial fractures treated by maxillofacial surgeons.

The introduction of locking plate/screw miniplates and reconstruction plating systems for the treatment of mandibular fractures

and continuity defects has offered advantages over other plating systems.

Aim

The aim of this study is to determine the efficacy of the use of locking plates in open reduction and internal fixation of the mandibular fractures.

Objectives

The objective is to re-establish normal occlusion and masticatory function in fractured mandible.

Methods

This was a prospective study analyzing 10 patients with undisplaced or minimally displaced mandibular fractures, who reported to department of oral and maxillofacial surgery, institute of dental sciences, bhubaneswar. The selected cases were treated by open reduction and internal fixation using the 2.0 mm locking plate/screw system.

This system does not require intimate adaptation of the miniplates to the underlying bone and has greater stability radiographic evaluation was done both pre and post operatively.

Results/finding

Open reduction and internal fixation with the 2.0 mm locking plate/screw system was achieved in all the 10 cases with satisfactory stability of the fracture fragments. Primary bone healing was noted in opgs of almost all cases of fracture reduction and fixation.

Conclusions

The locking miniplate system was found to be reliable and effective in management of mandibular fractures.

References

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2. Chandan Prabhakar, Jayaprasad N. Shetty, Hemavathy O. R.,Yadavalli Guruprasad. Efficacy of 2-mm locking miniplates in the management of mandibular fractures without maxillo-mandibular fixation national journal of maxillofacial surgery, vol 2, issue 1, jan-jun 2011.

Abstract No: 0923
Three different methods of arch bar stabilization

Dr. Abhishek Roy

Pacific Dental College and Hospital

Abstract

Avoiding penetrating injuries remains a vital aspect of protecting the surgeon against exposure to blood borne diseases. To establish a proper occlusal relationship, several techniques have been described, generally referred to as intermaxillary fixation (IMF).

Aim

This study has been done to compare the three different arch bar stabilization methods viz pencil wire twister, long needle holder and normal wire twister.

Discussion

Arch bar has been used as main stay for management of maxillo-mandibular injury. During IMF procedures, especially with wire placement, there is an increased risk of prick accidents. Handling of sharp instruments like wires heightens the risk of glove perforation and needle stick injuries. For the purpose of finding an alternate method of application of arch bars and also with a mind set of not

losing the advantages of arch bars in treatment of fractures, a pencil type wire twister was intended to be used for wiring procedures.

This split mouth study included 30 patients of either gender reporting to the department of oral and maxillofacial surgery, Pacific Dental College, Udaipur, between 2016 and 2017 with alleged history of trauma and requiring treatment of facial bone fractures by IMF under local anesthesia in which 3 different arch bar stabilization methods that is pencil wire twister, normal twister and long needle holder was compared on the non fracture site.

Conclusion

Through this study it was concluded that the number of glove perforations and incidence of wire breakage had statistically significant reduced levels with the pencil type wire twister.

Abstract No: 0936

Clinical evaluation of microplate and miniplate in mandibular anterior fracture

Dr. Harsh Kesharvani

ITS, Dental College, Muradnagar, Ghaziabad

Abstract

A number of fixation methods have been advocated for the treatment of mandibular fractures in the past four decades, such as transosseous wiring, various plating system which includes miniplating system like 2 D and 3 D plates, resorbable plates and screws etc. Mandible has a very limited space available in interforaminal and apical region and there is always a chance of damaging roots of vital teeth and mental nerve.

Discussion

To avoid this we used combination of microplate and miniplate in mandibular parasymphysis fracture and clinically evaluated it on the basis of stability and the occlusion with follow up of 3 months.

Material and Method

We used microplate and miniplate in open reduction and internal fixation of the mandibular parasymphysis fracture with microplate, 4 hole with gap on the superior border and miniplate, 4 hole with gap on the inferior border of the mandible on the basis of Champy's principle in 10 patients reported to our department.

Clinical evaluation was done on the basis of stability and occlusion with the follow up of 3 months.

Conclusion

We clinically evaluated and found the combination of microplate and miniplate can be successfully used in the undisplaced mandibular parasymphysis fracture.

Abstract No: 0979

Does impacted third molars influence incidence of condyle/angle fractures

Dr. Byreddy Aishwarya

Narayana Dental College

Abstract

Does impacted third molars influence the incidence of condyle or angle fractures? A retrospective study.

Abstract No: 0980

3-D locking titanium miniplates in management of mandibular fracture

Dr. Sudeep Gupta

Babu Banarashi Das College of Dental Sciences

Abstract

The concept of 3D titanium plates was reported first by Farmand and Duporieux in 1992 to overcome the shortcomings of rigid & semi rigid fixation.

Discussion

3 D plate stabilize the fracture segment rigidly by resisting the 3 dimensional forces namely shearing, bending & torsion forces occurring on the fracture site in function. However, the main disadvantage of the 3-D plate system lies with precise adaptation to the underlying bone and interference with the perfusion of bone underlying the plate.

The first biomechanical comparison of locking plates was made by Gutwald in 1999 & he concluded that a higher stability was achieved with the locking plates.

Thus it acts as a single unit and in locking system. Screw head & plate hole are threaded so as to lock with each other. This bone-plate system acts as an internal/external fixator, which results in better distribution of the load and prevents load concentration on a single screw, thus decreasing the risk of a screw's loosening and stripping.

Moreover, because anatomic adaptation of the plate to the underlying bone contour is not crucial, there are theoretically a fewer interferences with the adjacent vascular supply.

Conclusion

One of the advantages of 3-D plates is the simultaneous stabilization of the tension & compression zones, making the 3-D plate a time saving alternative to conventional bone plate. As precise adaptation of plate is not required thus reducing the operative time and chances of screw loosening. Use of 3D locking plate offers good option to achieve early functional mobility with assured stability in case of mandibular fractures.

Abstract No: 0993

Orbital fracture and ocular injury in maxillofacial trauma

Dr. Aditya Nandan, Dr. Premalatha Shetty and Dr. Ishan Singh

Manipal College of Dental Science Mangalore

Abstract

Background and Objective

Maxillofacial trauma is the most often encountered trauma cases in a hospital casualty. The present study conducted to determine the occurrence of concomitant orbital and ocular injuries amongst patients with maxillofacial trauma.

The study also helps in correlation of specific pattern of maxillofacial fractures.

Aim

To assess the etiology, pattern, occurrence and demographic data of orbital and ocular injuries in maxillofacial trauma.

Material and Method

Record of pt with trauma admitted in kmc attavar and ambedkar circle from 2006 to 2015 are analysed to isolate pt with concomitant ocular and orbital injury.

Result

Number of recorded cases were 686. number of ocular injuries related to maxillofacial trauma were 370. Out of total 686 patients, 566 (82.5%) male and 120 (17.5%) females. 236 patients (34.4%) were in 3rd decade and had highest maxillofacial injury. Maximum number of cases were of zygomatico-maxillary complex fractures (44.75%) 266 cases in males and 41 in females. A total of 351 cases of orbital fractures (isolated + concomitant) were reported. 44 (12.5%) cases of isolated orbital floor fractures were seen.

Sub conjunctival haemorrhage accounted for maximum number of cases amounting to 59.19%. Least number of cases seen were of traumatic mydriasis (0.28%). Out of 370 cases of ocular injuries, 249 (67.3%) with fracture of zygomatico-maxillary complex.

Conclusion

The present study was carried out to seek attention towards concomitant orbital and ocular injuries in maxillofacial trauma patients. It is evident from the study that there is very high probability of concomitant ocular injury in maxillofacial trauma patients.

Total 67.3% pt had associated ocular injuries. This study emphasizes on the importance of long term and continuous data collection and records management of trauma patients which may help health care providers with necessary information for development of treatment protocols and device measure for prevention of complications.

Abstract No: 1002

Airway management in maxillofacial trauma patients

Dr. Abhigyan Kumar

Sardar Patel Post Graduate Institute of Dental and Medical Sciences

Abstract

Introduction

Securing an airway during the management of maxillofacial injuries remains a challenge and is an important part of treatment. Airway obstruction from hemorrhage, tissue prolapse, or edema may require emergent intervention for which multiple intubation techniques exist. Competing needs for both airway and surgical access create intra-operative conflicts during repair of maxillofacial fractures.

Objectives

To secure the airway in patients with severe facial injuries, and familiarity with available techniques allows for the most expedient and least morbid means of success. Orotracheal intubation remains the primary method of securing the emergent airway.

Methods

Orotracheal intubation remains the primary method of securing the emergent airway. Fiberoptic-assisted nasotracheal intubation has gained popularity in managing difficult airways with severe skull base and maxillofacial injury. Temporizing measures such as the laryngeal mask airway and esophageal/tracheal combination tube provide ventilation until a definitive airway can be obtained. Submental or transhyoid intubation also a method of securing airway.

When other measures fail, cricothyroidotomy is an expedient means of tracheal intubation.

Results

Correct airway management and the maintenance of its patency is an essential skill of the health-care team which intervenes at the pre-hospital scene of emergencies.

Conclusion

Management of patients with maxillofacial trauma presents difficulties specific to injuries of the upper airway. Multiple options exist for securing the emergent airway, and specific interventions will depend on the availability of instruments and experience of practitioners in each setting.

Abstract No: 1023

Modified subbrow incision for nasal fractures

Dr. Nisha Garg, Dr. Sonal Anchlia, Dr. Nisha, Dr. Hardi, Dr. Philip

Govt. Dental College & Hospital, Ahmedabad

Abstract

Introduction

Nasal bone fractures treated with open reduction and internal fixation (ORIF) either uses unsightly incisions directly in the glabellar region or cumbersome hemicoronal or bicoronal incisions.

A bicoronal approach offers adequate exposure but has disadvantages. Other more direct incisions, such as frontalis, rhytid, butterfly, though are smaller, give conspicuous scars. The main problem of nasal fractures is aesthetic deformity of face and if the surgical approach leaves a scar, it should not be considered ideal for treatment.

Till date, the subbrow approach has been used in management of frontal sinus fractures. Here we propose a smaller, modified version of the subbrow incision for management of nasal fractures.

Objectives

To evaluate the efficacy of modified subbrow incision as an approach for orif of nasal fractures and the complications associated with it.

Methods

10 adult patients having displaced nasal bone fractures requiring ORIF with or without concomitant midface and those not possible to fix with closed reduction were selected. Patients with undisplaced isolated nasal bone fractures and those with cranial fractures requiring bicoronal approach were excluded.

The incision line extended from the medial most part of the eyebrow to a point slightly medial to the medial limbus axis line following precisely the lower edge of eyebrow to obtain an inconspicuous scar.

Results

Stable fixation, restoration of contour deformities and barely visible scars with no postoperative complications were observed using this approach.

Conclusions

The modified subbrow approach offers a good cosmetic result and adequate accessibility to perform ORIF of nasal bone fractures.

References

1. Subbrow approach as a minimally invasive reduction technique in the management of frontal sinus fracture; lee y etal, arch plast surg2014; 41; 679–685.

Abstract No: 1028 Mystery Behind Missing Teeth

Dr. Vijaya Lakshmi G

KVG Dental College and hospital, Sullia

Abstract Introduction

Trauma to the oral region occurs frequently and makes up 5% of all injuries for which people seek treatment in all dental clinics and hospitals in a country.

The highest incidence of dentoalveolar trauma occurring because of work was between the age group of 20 to 40 years. Any intruded teeth or foreign body missing from the oral cavity post trauma can be displaced into mainly 3 paths: 1) expulsion, 2) aspiration or 3) ingestion purpose.

Aim

The purpose of this poster is to describe a case of traumatic displacement of maxillary anteriors into the nasal cavity and to describe on various investigations to diagnose, to know the possible displacement of maxillary permanent anteriors into the nasal cavity and further displacement of that teeth into the gut, complications associated with it and management.

Methods

Various investigations were carried to rule out the location of missing teeth such as CT scan, PA chest x-ray, lateral neck x-ray, erect abdomen X-ray, endoscopic exploration was done.

Findings

Using all these investigations, tooth was found to be displaced from nasal cavity to the GIT after removal of nasal packing. The tooth was expelled in feces with use of laxatives.

Discussion

Dental and facial traumas can influence peoples lives, affecting their appearance, speech, and diet habits. This poster can aid the oral and maxillofacial surgeons in primary management of the teeth lost post-trauma, diagnosis and various investigations to be done in hierarchy to rule out possible displacement of missing teeth and its management.

Abstract No: 1043 Recovery of infraorbital parasthesia in zmc fracture cases

Dr. Israel Nathanael Raj

Sri Balaji Dental College and Hospital

Abstract

Parasthesia recovery in zygomatic complex fracture cases are well observed clinically, than unilateral zygomatic complex bone fracture cases where only reduction of the zygomatic bone is carried out.

Clinically examined by photographic skin mapping and neurological assessments and extended follow ups, post operatively.

Abstract No: 1045 Maxillofacial trauma: the controversial aspect

Dr. Gaurav Ramchandra Bhavar, Dr. B. M. Rudagi

ACPM Dental College & Hospital, Dhule

Abstract

Craniomaxillofacial trauma management has improved day-by-day. In some aspect of facial trauma many controversies still exist.

The literature lacks a clear cut description of the best practises used for most fractures. The successful treatment and avoidance of complication ultimately depends upon surgical judgment.

Discussion

Judgments are influenced by array of variables. I will be attempting to outline some basic controversial points maxillofacial trauma management. For e.g. In mandible fracture debate regarding open versus closed reduction of sub condylar/condylar fracture, its optimal timing for repair of mandible fracture. My poster will reveal some current literature to resolve such controversies, which would improve patient care by reducing variability and uncertainty in management of facial trauma patients.

Result

My ultimate goal is create the guidelines to guide surgeon and improve operative efficiency and enhance patient care.

Abstract No: 1067 Bioresorbable Plates in Maxillofacial Trauma

Dr. Deepak Kumar C

SCB Dental College and Hospitals Cuttack

Abstract

With the introduction of biodegradable materials in the field of medicine, a new treatment modality was introduced as a substitute for titanium plates.

Bioresorbable plates and screws have very high success rate in open reduction and internal fixation. These plates are made of poly-alpha-hydroxyl acid derivatives namely poly-L-lactide (plla), poly glycolide (pga) and polydioxanone.

Discussion

These materials degrade in aqueous media to monomers, which are metabolized and excreted by the lungs as carbon dioxide and water.

The resorption process of the bioresorbable osteosynthesis material did not cause acute or chronic inflammatory reaction or foreign body reaction. Degradation is faster in vivo than in vitro, partly because cellular enzymes enhance it. Thus the use of these biologically inert and resorbable plates should potentially eliminate the need for a second operation for their removal.

Their main advantages are that they are biologically inert, presents no thermal conductivity. Decreases the radiographic reflex, allowing the examination using computer tomography and magnetic resonance.

They have less strength as comparable to metallic plates but they can keep their structural integrity during bone callus formation period, thus can provide sufficient strength to permit bone healing.

Conclusion

Due to slow resorption they transfer stresses slowly to bone preventing osteoporosis, thus stress shielding effect is not a feature. Bioresorbable plates have not been found to have apparent effect on cranial growth. They can be ideal for growing young patients.

Abstract No: 1068**Surgical approach to the various zygomaticomaxillary complex fractures**

Dr. J. Prashanth

MNR Dental College and Hospital

Abstract

Zygomaticomaxillary complex (ZMC) fractures are a group of fractures that can significantly alter the structure, function, and appearance of the midface and the globe as well.

Aim

The aim of this study is to know about various surgical approaches that are suitable for the various kinds of ZMC fractures.

Rehabilitation as a whole is necessary considering all the structural and anatomical planes to maintain the function, symmetry as well as the esthetics of the patient. The treatment approach to zygomatic complex fractures varies among surgeons.

Orbital floor reconstruction might be necessary in some extensive ZMC fractures involving the orbit, which should be addressed and followed up thoroughly post operatively to obtain pleasing results.

Abstract No: 1078**Two versus three point fixation of displaced zygomaticomaxillary complex fractures**

Dr. Amit Kumar

K. D. Dental College & Hospital, Mathura

Abstract**Introduction**

The zygoma is a prominent bone in facial skeleton and contributes to structural and functional stability of craniofacial complex. Zygomatic bone is anatomically a tetrapod structure as it maintains four point of articulation with frontal bone, temporal bone, maxilla and greater wing of sphenoid.

As zygoma is associated with adjacent bones, fractures to this region are termed as zygomatico-maxillary complex (ZMC) fractures. After evolution of bone plating systems, stabilization or fixation of ZMC fracture segments by two point and three point fixation managed with different surgical approaches.

Objective

To evaluate the efficacy of two point & three point rigid internal fixation by non compression mini plates in immobilization of zygomatico-maxillary (ZMC) fractures.

Methods

Reduction of zygomatico-maxillary complex (ZMC) fractures by two point fixation with non compression mini plates at fronto-zygomatic

(FZ) suture through lateral eyebrow incision and at infra-orbital rim through subciliary incision under general anaesthesia.

Reduction of ZMC fractures by three point fixation at fronto-zygomatic (FZ) suture through lateral eyebrow incision, at infra-orbital rim through subciliary incision and at zygomaticomaxillary (zm) buttress through gingivo-buccal sulcus incision under general anaesthesia.

Results

Three point fixation maintained better stability at fracture site resulting in decrease incidence of vertical dystopia and enophthalmos with better malar projection and malar height.

Conclusion

We recommend three point rigid fixation of fractured zygoma after accurate reduction to maintain adequate stabilization against masticatory forces during fracture healing phase.

Abstract No: 1079**Use of 3-dimensional plates in management of condylar fractures**

Dr. Prasun Kumar Dubey

Armed Forces Medical College

Abstract

Mandible is one of the commonest bones to be involved in craniofacial trauma and about 25% to 35% of all mandibular fractures are fractures of the mandibular condyle.

Several techniques of orif have been used which include non-rigid fixation by wire osteosynthesis, rigid fixation by compression osteosynthesis using dynamic compression plates or eccentric dynamic compression plates, lag screws and semi rigid fixation.

Farmand m put forward a new system of 3D plates made of titanium in 1992. This type of 3-D plate holds the fracture fragments rigidly by resisting the forces in three dimensions of space.

Conclusion

The geometry of the plate assures a good stability against the shearing, bending, and torsional forces acting between the fractured segments. Some of the advantages that were noted in this technique were its ease of use, good resistance against torque forces and the compact form of the plate. This system replaces two plates with one, thus reducing the duration of surgery. The size of surgical approach is also reduced and minimal tissue dissection is required which ensures good blood supply to the bone.

Abstract No: 1082**Internal fixation of mandibular fractures lag screws high dimensional stability**

Dr. Mangilapally Vinay Kumar

CKS Theja Institute of Dental Sciences & Research

Abstract

Lag screw can be used for the fixing of fractured bone. when used properly, lag screws offer greatest rigidity when compared to all other rigid fixation methods.

This lag screw works on the principle that as the screw is tightened the distal segment is pulled into compression against the proximal fragment by the screw head.

This creates friction thus reducing interfragmentary movement. Lag screws may be used in combination with plates and screws.

Abstract No: 1085

Efficacy of coronal incision for treating zygomatic complex fractures

Dr. Neethu Satheesh V Satheesh Chandran, Dr. Sujeeth Kumar Shetty, Dr. Saikrishna Degale Dr. Manjula

JSS Dental College and Hospital

Abstract

Approach provides maximum exposure of fracture segments, minimise potential for injury to adjacent structures and enable good cosmetic results.

Coronal incision is the most versatile approach to various areas in craniomaxillofacial region and provides excellent exposure and aesthetics.

Aim

To study the efficacy of coronal incision for treating zygomatic complex fractures and to evaluate the advantages, indications and complications associated with it.

Methods

In this prospective study, 12 patients were randomly selected requiring open reduction and internal fixation of comminuted zygomatic complex fractures. All patients were treated under general anaesthesia following routine haematological, biochemical, and radiographic examinations.

Patients were all treated by coronal approach for open reduction and internal fixation of fracture fragments. Results in all cases post-operative complications were relatively minor.

The temporal branch of facial nerve weakness persisted for 3 months in 1 case, was very mild in 5 cases and absent in 6 cases. The time taken for exposure of the fracture site ranged from 25 minutes to 40 minutes. The access to the fracture site was good in 5 cases and excellent in 7 cases. Anatomic reduction achieved was good in most cases. There were no cases of flap infection and 1 case of stitch abscess reported, was managed by debridement and antibiotics.

Conclusion

Coronal approach facilitates excellent access to zygomatic complex and arch, accurate reduction and fixation of fragments and provides good cosmetic results

It also has disadvantages like long operating time, risk of facial nerve injury, scarring in patients with male pattern baldness and paraesthesia of operated site. Therefore, the incision should be judiciously used and indications strictly applied.

References

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Abstract No: 1089

Assessment of masticatory efficiency following zmc fractures

Dr. Chinju Raja Punnen, Dr Eapen Thomas Unit Chief Pushpagiri College of Dental Sciences

Pushpagiri College of Dental Science, Perumthuruthy, Thiruvalla

Abstract

The zygomatic region is involved in 42% of facial fractures and accounts for 64% of all middle third fractures.

The zygomatic bone plays a pivotal role as the cornerstone of the facial buttress system, serving attachments for facial muscles, contributing for the transverse width and the facial eminence in cosmetic aspect too.

Discussion

Hence fractures of ZMC affect the individual from a functional and as well as aesthetic point of view and inadvertently result in compromised functions of masticatory muscles.

There are no reliable clinical methods to evaluate whether a masticatory muscle is affected by a fracture of ZMC or functional rehabilitation is adequately achieved by fracture reduction and fixation.

Conclusion

The surface electromyography and bite force analyzer are been used as an investigatory tool to quantitatively evaluate the functional changes in the activity masticatory muscles analysing post operatively.

Abstract No: 1111

Zygomatic coronoid ankylosis a case report

Dr. Urvashi Malviya

Sri Aurobindo College of Dentistry Indore

Abstract

Ankylosis is a pathology normally occurring between two bones of a joint causing fibrous adhesion or complete bony union thereby reducing movement of the joint.

Trauma in the maxillofacial region if left untreated may lead to fibrous or bony ankylosis involving TMJ. But the incidence of ankylosis in the region between the zygomatic bone and coronoid process of the mandible, where there is no preexisting joint, is rare.

Temporo-mandibular joint ankylosis was classified into two types, intra articular or true ankylosis, and extra articular or false ankylosis. Fibrous or bony adhesion between the coronoid process and the zygomatic arch is a rare cause of extra-capsular/extra-articular ankylosis. It may follow facial fractures caused by treated and untreated fractures of the zygomatic complex with or without concomitant fracture of the coronoid process, chemical burns, mandibular fractures, infections involving the infratemporal space, local surgical complications, extension of intracapsular ankylosis and due to the enlargement of the coronoid process.

Case Report

In this poster we are presenting a case of left zygomatic coronoid ankylosis, 18 months post trauma of a 30 year male patient reported in our department which was treated with a successful surgical approach.

Abstract No: 1112**MMF Screws***Dr. Karam Sujitha**DRS S&NRSIDS***Abstract**

Maxillomandibular fixation screws for IMF are used as a viable alternative to arch bars in the treatment of mandibular fractures.

They can be easily placed under Ia with reduced risk of penetrating injury to the surgeon and decreased surgical time in placement and removal.

Discussion

They are less expensive, cause less trauma to the periodontium and proper oral hygiene can be maintained by the patient. Mainly indicated in undisplaced fractures or with mild displacement of occlusion where long term imf is not needed.

Conclusion

It can be used safely in HIV, HbsAg patients as there is reduced risk of penetrating injury to the surgeon.

Abstract No: 1157**Localization of the displaced plate in the fronto zygomatic region using 26 gauge needle – a case study***Dr. S. Anushya**Tamilnadu Government Dental College and Hospital***Abstract**

This e-poster deals about the case study where a non-invasive investigatory method of localization was carried out.

Discussion

The patient presented with a displaced plate in the front zygomatic region using the 26 gauge needle and stainless steel wire as the guiding wire. Radiographs were taken to localize the plates in the tissue space successfully. Thus an invasive exploratory surgery was avoided.

Abstract No: 1163**Anchor lag screws in management of mandibular anterior fractures***Dr. Sajida Ali Begum**Al Badar Rural Dental College and Hospital***Abstract****Background**

Lag screw osteosynthesis is a well proven technique. The spherical head of the screw acts as a wedge. Combining this screw with a biconcave washer broadened the range of its application.

Aims and Objective

To evaluate the efficacy of anchor lag screw in the management of mandibular anterior fractures in terms of post operative occlusion, infection, pain and radiographic healing of fractured site.

Materials and Methods

The study was conducted with a sample size of 20 patients with mandibular anterior fractures. Patients who fulfilled the inclusion criteria of symphysis and parasymphysis fractures underwent open reduction and internal fixation under general anaesthesia using 2 mm titanium lag screw with 3 mm washer.

Results

In clinical evaluation post operatively, occlusion was satisfactory in 100% cases. There were no signs of infection and pain at any point of follow up. The radiographic assessment at 3rd week, osteogenesis was seen in all patients and at 3rd month osteogenesis was seen in 16 patients and fusion in 4 patients.

Conclusion

The use of anchor lag screw is reliable in management of displaced and undisplaced anterior mandibular fractures. Use of biconcave washer prevents bone loss near the screw head and also reduces the chances of screw loosening.

Results

It is an excellent cost effective means of achieving rapid and safe fixation which is followed by primary bone healing in anterior mandibular fractures.

Abstract No: 1190**Modified tragus edge approach (MTEA) for mid-level or low-level condylar fractures: a case series***Dr. Praveen Kumar Singh, Dr. Geeta Singh Prof. Shadab Mohammad Prof. R.K.Singh Prof. Divya Mehrotra**King George's Medical University***Abstract**

A case series the condylar process is frequently involved in oral facial fracture, and condylar process fracture account for 25–50% of fractures of the mandible. Surgical management of condylar fractures are preferred for low condylar fractures. Various approaches have been described in literature for approach to the condyle. A case series of low condylar fracture operated via the modified tragus edge approach (MTEA) has been discussed.

Aims & Objective

To evaluate the efficacy of modified tragus edge approach (MTEA) for mid-level or low-level condylar fractures.

Materials & Methods

Patient with rta presented to opd with # subcondyle complaining of reduced mouth opening, deviation of mandible on opening and pain. 11 patients were operated using modified tragus edge approach for exposure of the condyle and fixation was done with 2.0 mm ti system under ga.

Results

The patient was evaluated for pain, swelling, mouth opening, paraesthesia, occlusion, parotid fistula, facial nerve injury, scarring. All parameters were significantly improved.

Conclusion

Mtea is safe and has good aesthetic outcome. MTEA represents an appropriate surgical access to mid-level and low condylar fractures. However complications associated with facial nerve injury and parotid fistula must be anticipated as with other pre auricular approaches.

Category - Dental Implantology and Preimplant Surgery

Abstract No: 0181

CBCT accuracy in detection of crestal bone changes around implants

Dr. Harsh Ranjan

Al-Badar Rural Dental College & Hospital

Abstract

Aim & objectives

Present study was conducted to evaluate the efficacy of cone beam computed tomography (CBCT) for detection of crestal bone changes around dental implants. Bone width at 3rd and 6th months follow up of implant placement.

Materials & methods

Eleven implants were placed under local anaesthesia at mandibular molar site of 9 patients. CBCT was taken immediately after implant placement, at 3rd month and 6th month of follow-up to measure crestal bone loss. The measurement was done on mesial, distal, buccal and lingual aspect from crest of alveolar ridge to the superior border of mandibular canal. The crestal bone width (bucco-lingual) was also measured on CBCT.

Results

The average crestal bone loss of 0.69 mm \pm 0.38 mm after 3 months and 1.36 \pm 0.43 mm after 6 months was recorded and was found to be statistically not significant. The crestal bone loss seen on mesial and distal aspect after 6 months was 0.0337 & 0.0241 respectively and was statistically significant. However, they were within the normal range of bone loss according to albertson criteria. The mean change in bone width seen after 6 month was 0.7 mm which was statistically not significant.

Conclusion

We achieved a 100% success rate with all the implants with good osteointegration. The crestal bone loss was greater on mesial and distal aspect, but the overall average crestal bone loss was within acceptable range. CBCT is an excellent modality for submillimetric measurement of crestal bone loss on all four aspects around dental implants.

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Abstract No: 0203

The outcome of vertical alveolar ridge augmentation by intraoral distraction osteogenesis

Dr. Shah Priyesh Dakshesh

M R Ambedkar Dental College

Abstract

Introduction

Distraction osteogenesis (DO) is an alternative method for reconstructing atrophic alveolar bone. Common aetiologies of acquired alveolar bone loss are trauma, post extraction, traumatic avulsion of teeth, periodontal disease or after tumour resection. The nature of deficiency present an obstacle to ideal implant positioning by compromising aesthetic and prosthetic needs. Ilizarow demonstrated that gradual traction on bone after corticotomy creates stress that can stimulate bone regeneration and soft tissue expansion. Distraction osteogenesis was subsequently applied successfully to craniomaxillofacial bones both experimentally and clinically. Distraction osteogenesis has become now one of the method for reconstructing alveolar atrophy with contour deficits. The combination of distraction osteogenesis with osteointegration can produce a stable aesthetic reconstruction of the alveolar bone and attached mucosa. Alveolar distraction osteogenesis was introduced by chin and tooth in 1996, offered advantages of decreased bone resorption, lower rate of infection and no donor site morbidity.

Aim

The aim of this poster is to present the outcome of intraoral alveolar distraction osteogenesis conclusion - the alveolar distraction osteogenesis seems to be an effective technique to treat alveolar ridge deficiencies but adequate treatment planning is necessary for success allowing stable dental implant insertion in augmented bone.

Abstract No: 0258

Osseodensification

Dr. Kusum

PDM Dental College & Research Institute

Abstract

Osseodensification is a novel biomechanical bone preparation technique in which there is a low plastic deformation of bone due to rolling and sliding contact with the rotating bur. This technique is used now a days to place dental implants thereby reducing the necessity for bone grafting. Irrigation is used with the bur to eliminate overheating and create a hydrodynamic compression wave in the osteotomy. Osseodensification technique creates an autograft layer of condensed bone at the periphery of the implant bed by the aid of specially designed burs rotating in clockwise and anticlockwise direction. During the osseodensification technique, surgeons increase the bur diameters in sequence in a counterclockwise direction

(800–1500 rpm), which allows the expansion of a cylindrical osteotomy without excavating any bone tissue (densifying mode). When needed, the burs precisely cut bone at (800–1500 rpm) in a clockwise direction (cutting mode). Osseodensification increases primary stability and creates a densification crust around the preparation site by compacting and autografting bone around the entire depth of the hole. This poster intends to highlight the salient features of this technique.

Abstract No: 0278

Patient Specific Subperiosteal Implants

Dr. Amrit Kaur Pelia, Dr. Tejinder Kaur, Dr. Ramandeep Singh Bhullar, Dr. Sarika Kapila

Sri Guru Ram Das Institute of Dental sciences and Research

Abstract

Over the past decade with rapid advances in computer-aided manufacturing technology (CAD/CAM), patient specific subperiosteal implants have been introduced for reconstruction of atrophic arches. In 1998, McAllister and colleagues reported on application of stereolithography for fabrication of patient specific subperiosteal implants. The subperiosteal implants were introduced in 1940 by Dahl and they are placed between periosteum and residual alveolar bone. Stainless steel, cobalt, chrome, surgical grade vitallium, titanium and polyether ether ketone have been materials used for subperiosteal implants. Advantages of patient specific subperiosteal implants include single surgical intervention, their use in pronounced bone atrophy, adequate retention and stability, lesser complication rate, higher success rate and short duration of treatment. For fabrication of patient specific subperiosteal implants, cone beam computed tomography (CBCT) is done for acquiring accurate bony dimensions of areas where subperiosteal implants have to be placed and then this data is imported in bone reconstruction software program to create 3D virtual bone model which is used to virtually design subperiosteal implants. These implants are installed and fixed with screws. The disadvantage of patient specific subperiosteal implants is that it requires special training of staff and it is a single unit, so if patient experiences bone loss, infection or gingival hypertrophy in any limited area of maxilla and mandible then entire subperiosteal implant removal is required. In conclusion, single stage rehabilitation of severely atrophic alveolar ridge with patient specific subperiosteal implants is a reliable method. References: 1. Mounir M, Atef M, Abou-elfetouh A, Hakam MM. Titanium and polyether ether ketone (PEEK) patient-specific subperiosteal implants: two novel approaches for rehabilitation of the severely atrophic anterior maxillary ridge. *International journal of oral and maxillofacial surgery*. 2018 May 1;47(5):658–664.

Abstract No: 0342

Basal Implants - A Boon for Atrophic Ridges

Dr. Deepaben Brahmabhatt

Ahemdabad Dental College and Hospital, Bhadaj, Gandhinagar

Abstract

Implant placement in severely atrophic jaws is specially challenging because of the poor quality and quantity of the future implant bed.

Calvarial or iliac bone grafts, mental nerve displacement, and sinus lift procedures are often used to overcome the initially unfavourable anatomical and mechanical conditions. Despite acceptable success rates, these approaches involve unpredictable degrees of morbidity at the donor and/or recipient sites. Furthermore, patients are sometimes reluctant to undergo such procedures. In that cases where the vertical bone support is reduced, basal implants can be a better option. Basal implantology is also known as bicortical implantology or cortical implantology. It is a modern implantology system which utilizes the basal cortical portion of the jaw bones for retention of the dental implants which are uniquely designed for giving immediate implant placement for increased patient functional and psychiatric comfort. It also acts as a prosthetic framework in geriatric population.

Abstract No: 0396

Zygoma implants in severely atrophied maxilla

Dr. K Alok chandar

M.R. Ambedkar Dental College and Hospital

Abstract

Zygoma implants in severely atrophied maxilla zygomatic bone is a suitable anatomic structure for implant placement since it crosses 4 cortices and provides multicortex stabilization. Zygoma implants were designed to rehabilitate atrophic maxilla; maxilla subjected to resection for oncological reasons, with bone loss secondary to trauma and congenital conditions. Zygomatic implant can be an effective device for rehabilitation of the severely resorbed maxilla. If zygomatic implants are used, on lay bone grafting or sinus augmentation is not necessary and these implants also eliminate donor site morbidity.

Aim

Aim of this poster is to present a case of atrophic maxilla rehabilitated with zygomatic implant showing its advantages and results.

Conclusion

Zygomatic implant is an alternative procedure to bone augmentation, maxillary sinus lift in patients with severely atrophied maxilla.

Abstract No: 0409

Devices used in Sinus Augmentation

Dr. Pratima Prakash Gaonkar

M R Ambedkar Dental College

Abstract

Background

Dental implants are used as a treatment modality for prosthetic rehabilitation of edentulous patients. Inadequate posterior bone height, increased pneumatization along the maxillary sinus creates close approximation of sinus to the crestal bone. In such cases the residual vertical bone height is decreased making the implant placement difficult. The outcome of such procedure is to increase the residual vertical bone height. The sinus lift techniques had a lot of modifications through the years. Various surgical techniques have been presented to access the sinus cavity and elevate the sinus membrane.

Aim

The aim of this poster is to present a brief description about various devices used in sinus augmentation.

Material & Method

Various minimally invasive sinus lift devices on the market can be clustered according to the drilling speed. Bone compression kit, cowellmedi sinus lift kit, sinu-lift system, disc-up sinus reamer and sinus master on the other hand, high-speed drilling is to be applied when using the sinus crestal approach (sca) dentium advanced sinus kit sinus lateral approach (sla) kit, samuel lee's internal sinus grafting system. The antral membrane balloon elevation (ambe) technique is another minimally invasive technique to elevate the sinus membrane. An inflatable balloon is used to elevate the sinus membrane. Another novel technique evaluated a simplified minimally invasive trans alveolar sinus elevation technique utilizing calcium phosphosilicate (cps) putty for hydraulic sinus membrane elevation. Conclusion: the major part of success with implant placement in this region lies in treatment planning. It is of utmost importance that the preoperative evaluations are done perfectly and the most suitable technique is decided accordingly for that particular situation, to improve the prognosis of that treatment.

Abstract No: 0418
Graftless Solution to Sinus Augmentation

Dr. Shashank Bagaria, Dr. Mukul Padhye

D Y Patil Dental College, Mumbai

Abstract

Graftless solution to sinus augmentation!

Introduction

maxillary sinus floor augmentation (also termed sinus lift, sinus graft, sinus augmentation or sinus procedure) is a surgical procedure which aims to increase the amount of bone in the posterior maxilla (upper jaw bone), in the area of premolar and molar teeth, by lifting the lower Schneiderian membrane.

Aim and Objectives

To show there is postoperative osteointegration in maxillary sinus lift procedure with immediate implant placement.

Materials and Methods

In 10 patients 22 implants were placed with lateral window maxillary sinus lift procedure.

Conclusion

20 implants were stable and classified as osteointegrated.

Abstract No: 0441
Tubero Pterygoid Implants

Dr. Modepally Sreelekha, Dr. Rama Mohan Kodali, Dr. Koteswara Rao

DRS Sudha and Nageswara Rao Siddhartha Institute of Dental Sciences

Abstract

Tubero pterygoid implants have been designed to allow anchorage in the posterior atrophied or resorbed maxilla without sinus lift or bone grafts to achieve stability and high rates of long term success. This

poster describes the surgical techniques, complications, advantages, disadvantages of tubero pterygoid implants.

Abstract No: 0462
Should immediate loading of implants be favoured?

Dr. Mohammed Imtiaz Ali L

M R Ambedkar Dental College

Abstract
Background

The immediate implant loading concept challenges the conventional healing time of 3–6 months of no loading before the restoration of implants. The rationale for immediate loading is not only to reduce the risk of fibrous tissue formation but also to minimize woven bone formation and to promote lamellar bone maturation to sustain occlusal load. In reality the bone-implant interface is stronger on the day of implant placement compared with 3 months later. According to Frost when the bone is loaded between 200 to 2500 micro strain called the ideal load bearing zone or physiologic zone results in well organized and mineralized lamellar bone at the interface. Hence to decrease the risk of occlusal overload and its resultant formation of woven bone, which can be achieved by increasing the functional surface area to the implant-bone interface. This can be achieved by increasing the number of implants, selecting large diameter implants, improving implant design and its surface conditions. Minimizing the surgical trauma during osteotomy preparation like thermal injury and micro fractures can also decrease the risk of immediate occlusal overload.

Aim

The aim of this poster is to present the advantages of immediate loading of implants and various factors which can decrease the risk of immediate occlusal overload and there by promoting conditions favourable for immediate loading of implants.

Materials and Methods

Roughened titanium implants are used in this study. A device called osstell is used to check the primary stability of implants to determine whether immediate loading can be done at the time of implant placement.

Conclusion

Most studies agree that immediately loaded implants are successful when various procedures are followed which minimizes the risk of occlusal overload.

Abstract No: 0481
Advanced surgical techniques to enhance the dental implant site

Dr. Thushara Kumari, Dr. Arvind R Head of the department

Department of Oral & Maxillofacial Surgery Manipal College of Dental Sciences, Mangalore

Abstract
Introduction

Dental rehabilitation of partially or totally edentulous patients with oral implants has become a routine treatment with reliable long-term

results. However, unfavorable local conditions of the alveolar ridge, due to atrophy and trauma sequelae, may provide insufficient bone volume or unfavourable vertical, horizontal, and sagittal intermaxillary relationships, which may render implant placement impossible from a functional and esthetical viewpoint. Literature speaks of various methods to augment the bone volume of deficient sites. This poster will focus on the advanced surgical techniques like socket preservation, onlay grafting, guided bone regeneration, alveolar bone splitting, alveolar distraction osteogenesis, sinus floor elevation, maxillary interpositional graft combined with Le Fort I osteotomy, osseointegration of implants in zygomatic bone etc. that compensate the quality and quantity bony deficiencies.

Objectives

Through this poster, we aim to highlight the various advanced surgical techniques to enhance the implant site.

Results

Literature reports have illustrated that these advanced surgical techniques have successfully managed the expected anatomical difficulties during implantation.

Conclusion

Though these advanced surgical techniques have overcome the expected anatomical difficulties during implantation. It is important to plan the treatment by weighing the success and failures and choose the suitable technique, keeping the technique as simple and as predictable as possible.

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Abstract No: 0487

Comparison between conventional flap and flapless techniques in implant placement

Dr. Damarasingu Rajesh

St. Joseph Dental College

Abstract

The goal of modern dentistry is to restore the patient to normal contour, function, comfort, esthetics, speech and health, whether by removing caries from tooth or replacing several lost teeth. The commonly available options for the replacement of missing tooth are removable partial dentures and fixed partial dentures. However, these prostheses have certain limitations. Dental implants can be a successful replacement option for missing teeth, potentially improving the quality of patient's lifestyle through a high standard of masticatory & speech function and aesthetics, eliminating the negative impacts of removable and fixed partial dentures. In the recent years, dental implants have become the treatment choice for rehabilitation of completely or partially edentulous patients. A clinical trial was designed to evaluate and compare the effect of implant placement by flap and flapless technique on the crestal bone level at the implant site. This poster highlights the advantages and disadvantages of flap and flapless techniques.

Keywords Dental implants, flap and flapless techniques.

Abstract No: 0500

Graft Less Solution for Full Mouth Rehabilitation - All On 4

Dr. Tarun Nagpal

M R Ambedkar Dental College

Abstract

Introduction

Severe atrophy of the alveolar ridge often develops following tooth loss, with increasing severity over time in the edentulous jaw. Several prosthetic treatment options exist for this particular situation: complete dentures, removable implant-retained prostheses, or fixed implant-supported prostheses. However, implant retained or fixed implant-supported prostheses provide a higher degree of patient satisfaction than removable prostheses. Classical implant treatment, as described by Brånemark in the 1960s, involves implants being placed in a two-stage procedure, with exposure to the oral environment taking place after a healing period of 3 to 6 months to achieve a reproducible osseointegration to avoid grafting procedures and to utilize pre-existing bone in the most effective way, angled implants (tilting of implants) is a well-documented alternative, with no apparent clinically significant difference in success rates compared with axially placed implants. Provided the implants are placed strategically two posteriorly (tilted between 30° and 45°) and two anteriorly (axial) and well anchored (achieving a primary stability of at least 30 ncm).

Aim

To evaluate and present the efficacy of all on 4 treatment concept in full mouth rehabilitation of edentulous jaws conclusion: the probability for good treatment outcomes is high with all on 4 treatment concept (98% for the maxilla and 98.1% for the mandible after 5 to 10 years of follow-up).

Abstract No: 0528

Role of autogenous iliac crest graft in maxillary reconstruction

Dr. Sharvika Sharad Aher

Dr. D.Y. Patil Dental College & Hospital

Abstract

Introduction

Resorption of the edentulous or partially edentulous alveolar ridge or bone loss due to periodontitis or trauma frequently compromises dental implant placement in a prosthetically ideal position. Therefore, augmentation of an insufficient bone volume is often indicated prior to or in conjunction with implant placement to attain predictable long-term functioning and an aesthetic treatment outcome.

Aim

To study the versatility of autogenous iliac-crest bone graft for treating a 29 year old male with loss of anterior teeth due to trauma and evaluate the osseointegration, stability and long term survival associated with it.

Method

In this case study, examination revealed deficiency of volume of available bone in height and width. The maxilla was reconstructed by autogenous bone graft and fixed with miniplates and screws.

Results

In order to ensure successful osseointegration, stability and long term survival, the implant site should have sufficient bone quantity and quality.

Conclusion

The autogenous iliac crest bone grafting technique is the best way for reconstruction with less postoperative morbidity and economic cost, minimal invasive harvesting.

Abstract No: 0625 Socket Shield Technique

Dr. Sharma Reshmi Ramji

Bharti Vidhyapeeth Dental College and Hospital

Abstract

Socket shield technique

Aim

Tooth loss and subsequent ridge collapse continue to burden restorative implant treatment. Careful management of the post-extraction tissues is needed to preserve the alveolar ridge. In view of surgical augmentation to correct a ridge defect, the socket-shield technique offers a promising solution. As the root submergence technique retains the periodontal attachment and maintains the alveolar ridge for pontic site development, this case report demonstrates the hypothesis that retention of a prepared tooth root section as a socket-shield prevents the recession of tissues bucco facial to an immediately placed implant.

Materials and Methods

An adult male patient had a ferrule-less central maxillary incisor sectioned to prepare a socket-shield at implant placement. The implant was provisionalized and immediately loaded until definitive restoration at 4 months of healing.

Results

The implant osseointegrated successfully and without complication. Immediate postoperative as well as the 1 year follow up demonstrated a functional and aesthetic outcome of the treatment. The socket-shield technique in conjunction with immediate placement and provision-alization positively supported the ridge facial to the implant.

Conclusions

The socket-shield technique is a highly promising addition to clinical implant dentistry and this case report is among the first to demonstrate the procedure in clinical practice with a 1-year follow up.

Abstract No: 0643 Sticky bone (graft) in immediate implants

Dr. Muthukumaran P

Best Dental Science College, Madurai

Abstract

Implant supported prosthesis is one of the fast growing field in dentistry. Adequate amount of supporting bone is very important to avoid

implant failures bone augmentation may be necessary for adequate implant support in conditions like. Traumatic extraction periapical cyst surgical removal of impacted tooth. bone augmentation in deficient site is prerequisite for esthetic concern and to avoid implant failures sticky bone and cgf membrane placement is one of the best graft method, which firmly stabilizes the graft material in place and help in successful bone regeneration. Ref; 1. utilization of autologous concentrated growth factors (cgf) enriched bone graft matrix (sticky bone) and cgf-enriched... Jin kim university of california, los angeles 2. techniques for grafting the extraction site in preparation for dental implant placement michael s. Block, dmd*, walter c. Jackson, dds, md.

Abstract No: 0655 Management of mandibular atrophy using subperiosteal implants

Dr. S. Swathi

Saveetha Dental College and Hospitals

Abstract

Management of mandibular atrophy using sub periosteal implants background: well-designed sub periosteal implants have been reported to function successfully for many years. Among the relevant factors contributing to the success of this method are implant design, atraumatic surgery and understanding of the involved anatomic structures, accurate impression techniques, and appropriate occlusal adaptations of the final prosthesis. With advanced jawbone resorption, there may not be enough bone width or height for the root form implant. Many times, repeated attempts at bone grafting prove unsuccessful. In these cases, the sub periosteal implant can be of tremendous help a sub periosteal implant is a framework specifically fabricated to fit the supporting areas of the mandible or maxilla with per mucosal extensions for support and attachment of a prosthesis. The framework consists of per mucosal extensions with or without connecting bars and struts.

Case report

A 18 year old female patient reported to the dental surgery opd with the complain of missing posteriors. She gave a history of unicystic ameloblastoma which was resected 1 year ago. On clinical examination, she had a partially edentulous mandible with a severely atrophied ridge. CBCT revealed a total lack of bone density. Surgical plan of mandibular subperiosteal implants was formulated.

Conclusion

Given the choice between harvesting from the iliac crest with the associated morbidity of such grafts, along with the increased cost and time required by such an approach, the mandibular sub periosteal implant remained a more attractive treatment for this patient's severely atrophied mandible in this case. The advantages of sub periosteal implants include the predictability of the results and the high success rate. This technique utilizes less invasive surgery and is, therefore, preferable to the use of iliac crest or tibial graft.

Abstract No: 0707 Split Crest Implantology

Dr. Bhanu Mannava

Panineeya Mahavidyalaya Institute of Dental Sciences

Abstract

Split crest implantology a substantial technique for atrophic narrow ridges.

Bhanu mannava, 2. V. Giridhar kumar, 3. G. Venkateswara reddy. Atrophic bony ridges present a unique challenge to the dental implant surgeons. In the past, onlay grafts of bone harvested from the hip, maxillary tuberosity, symphysis of the chin, or external oblique ridge have been used with success in reconstruction of atrophic ridges. However, bone onlay grafting procedure require a secondary surgical site, which exhibits typical postoperative morbidity associated with harvesting. Additionally, onlay grafts require an additional 4–6 months of time period for healing, which delay time for implant placement. Graft failure is another drawback for ridge augmentation procedures. The split crest procedure is a quicker and reliable method where the atrophic ridge can be predictably expanded and grafted with alloplastic bone with prf as adjunct in faster and better healing with simultaneous implant osseointegration.

Dr. Bhanu mannava, postgraduate oral and maxillofacial surgery, panineeya institute of dental sciences and research centre, hyderabad. Dr. V. Giridhar kumar, M.D.S, professor, oral and maxillofacial surgery, panineeya institute of dental sciences and research centre, hyderabad. Dr. G. Venkateswara reddy, M.D.S, professor and head of the department, oral and maxillofacial surgery, panineeya institute of dental sciences and research centre, hyderabad.

Abstract No: 0737 Retrieval of Failed Dental Implants - Current Trends & Concepts

Dr. Ambika K B

Azeezia College of Dental Science & Research

Abstract

Dental implants are widely used for replacing the missing teeth of partially or completely edentulous patients. Many studies have confirmed that dental implants show predictable results with a high percentage of success. However, the burning problem that all the implantologists are confronted today is the complications and failures occurring with the hardware of osseo-integrated implants. Therefore clinicians must be aware of the mechanical complications, such as screw loosening, screw/implant fracture and prosthetic framework fracture. In some instances, failed implants may require removal and practitioners should be aware of techniques that can be used to remove failed implants to potentially enable future rehabilitation of an edentulous region. There are numerous methods for retrieval of failed dental implants. These can be found in literature and kits are provided by different companies. This poster is intended to provide an insight about removal of failed dental implants due to mechanical complications. This challenging situation can be dealt with either an innovative or an accepted approach. If it is managed with most

atraumatic and conservative manner, the possibility for re-implantation is much higher.

Abstract No: 0744 Digital dental navigation for oral rehabilitation

Dr. Vijaya C R

Krishnadevaraya College OF Dental Sciences, Bangalore

Abstract

Aims and Objectives

To assess the efficacy of digital dental navigation for oral rehabilitation with implants in patients who have undergone mandibular resection followed by reconstruction with fibula graft materials and methods: the surgical treatment planning is done from the end to the beginning in mind. The digital dental navigation allows the surgeon to assess with precision, the position and angulation of implants to be placed in the free fibula grafts that are used to reconstruct the mandible through the standard tessellation language system that combines the hard and soft tissue data from a pre-operative and post-operative perspective. This data also allows the patient to undergo the resective procedure for tumour primarily with pre- assessment of dental rehabilitation procedure at a later date.

Introduction

Oral rehabilitation construction methods have been developed to contribute to improving the patients' quality of life. Developments in the areas of oral implantology and rehabilitation along with microvascularized grafts have increased the possibility of rehabilitating patients undergoing hemimandibulectomy with more effective and lasting treatment. Information obtained by fusion of cbct and intraoral scanners as data in the form of standard tessellation language can be utilized to optimize the treatment plan and reduce time for both patient and clinician with an added advantage of precision.

Conclusion

Digital dental navigation has presented opportunities to evaluate, measure and analyze 3-dimensional surfaces of soft and hard tissues in diagnosis and treatment planning. The data thus obtained can be transferred to facilitate 3-d printing using CAD CAM technology which simply allows the clinician to plan the treatment with the end result in mind, also called α top-down planning.

Abstract No: 0762 Guided Surgery for Implants

Dr. Balaraj BV

MR Ambedkar Dental College And Hospital

Abstract

Abstract

Guided surgery for implants background: the growing interest in flapless implant surgery, together with the possibility of fitting prostheses with immediate function in edentulous patients, have led to the development of a software capable of planning and manufacturing a

surgical guide and prosthesis that can be placed immediately after implant insertion. Following flap raising, bone resorption takes place, and the resulting reduction in crestal height is related to the bone width of the zone involved. The flapless technique maintains the periosteum and blood supply to the bone, avoids modification of the gingival profile following the contour of the surgical incision, and shortens the surgery time. Thus by developing guides(stent) for implant placement results in obtaining better accuracy in implant positioning with relation to adjacent anatomical structures. This technique usually increases the success of immediate loading due to preservation of the blood supply and reduces postoperative discomfort for the patients.

Aim

The aim of this poster is to present a thorough insight about digitalised guided surgery system used in treatment planning and placement of implants.

Material & Method

System begins with digital impression. Digital impression refers to the scanned image, which will be obtained using an intra-oral scanner inside the mouth, with computer-aided, template-guided flapless implant surgery, the 3D diagnosis data software can be used to plan the correct implant position and to transfer the project to the surgical environment, allowing the correct realization of a surgical stent.

Conclusion

The digitalised guided surgery for implants is an alternative for traditional analogue system for implants as it results in reduce crestal bone loss, change in gingival contour, reduced operative time with better accuracy and early loading of prosthesis is possible.

Abstract No: 0782

Combination of autograft and xenograft in anterior maxilla for implants - a case report

Dr. Veeraragavan N

Ragas Dental College and Hospital

Abstract

Background

Maxilla have a thin facial bone wall. Such a thin bone wall may undergo marked dimensional diminution following tooth extraction. Resorption of the buccal plate compromises the morphology of the localized edentulous ridge and makes it challenging to place an implant in the optimal position for prosthetic restoration. Several surgical procedures to create sufficient bone volume have been developed, such as bone grafts, including onlay grafts, and interpositional bone grafts, guided bone regeneration, ridge expansion and combinations of these procedures. Autogenous grafts has been considered as a gold standard in bone grafting because of their osteogenic properties. However the associated complication & morbidity persuades the implant surgeon to use alternative methods like allograft, alloplast, xenografts.

Aim and Objectives

To evaluate the usage of combination of an autograft and xenograft for bone augmentation in deficient anterior maxilla. Methodology autogenous bone obtained from chin by trephine. Xenograft was combined with obtained autograft and used for anterior maxilla

augmentation. Changes were evaluated clinically and radiologically. Results bone augmentation achieved were clinically and radiologically acceptable.

Conclusion

This poster reviews the various aspects of chin grafts, where in the regional surgical anatomy, various incision designs, surgical protocols for harvesting and the possible clinical and esthetic complications of chin grafts have been discussed.

Keywords Chin graft, autogenous bone graft, xenograft, immediate implants.

Abstract No: 0790

Evaluation of graft-less chsl with simultaneous implant insertion

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Abstract

Background

The posterior maxilla is always a challenge for dental implant restoration. The presence of maxillary sinus and reduced sub-antral bone height are the limitations for implant insertion. With this in consideration study was carried out this for graft-less chsl and simultaneous implant insertion in partially edentulous posterior maxilla.

Aim

The aim was clinical & radiological evaluation of graft-less with simultaneous implant insertion.

Method

Study design was prospective interventional study. Sample size of seventeen patients and twenty-six implants inserted. Hiossen crestal approach sinus kit (cas-kit) specifically designed to easily and safely lift the membrane in the maxillary sinus from a crestal approach was used. The clinical and radiological follow-up was done for 1 year. The outcome variables are the gain in bone height and implant survival. Observations and results- no of patients treated were seventeen; ten male and seven female. The twenty-six number of implants and chsl performed. Presurgical bone height (h1) = 6.5 mm; post-surgical bone height (h2) = 11.7 mm; bone height gain (hg) = 5.6 mm; conclusion- the graftless chsl is predictable and safe for sinus lift. The gain of up to 5–6 mm of subantral bone is possible.

Keywords Sinus lift; crestal hydraulic sinus lift (chsl), maxillary sinus; schneiderian membrane, cas kit.

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Abstract No: 0799
Zygomatic Implants

Dr. Tharani. P

Sree Balaji Dental College and Hospital

Abstract

The purpose of the study is to identify and describe the different surgical techniques for placement of zygomatic implants reports in the literature and discuss the difference between them.

Abstract No: 0807
Recent Advances in Immediate Implants: Root Analogue Zirconia Implants

Dr. Shreya Srivastava

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Abstract

Recent advances in immediate implant systems: Root analogue zirconia implants. Introduction a good fit between implant and bone was considered an important factor for implant success. In modern times, tooth replica implant were reported as early as 1969. Zirconia, zirconia-based ceramic material, were first created in 1975 by British physicist Ron Garvie. Initially zirconia implants were like other common implants its only due to modern 3D investigation techniques that zirconia is being used as root analogue implants by reproducing the contours of the extracted tooth.

Objective

Overview of the technique of using root analogue zirconia implants as an immediate implantation material.

Method

Obtain the 3d form of the tooth to be replaced. This is done either through careful tooth extraction and scanning of the root, taking an impression of the tooth socket, or a pre-op CBCT scan. Gentle placement of the root analogue implant by simply tapping it in. The implant is placed immediately which is produced beforehand from a CBCT scan. A protective splint is fitted to protect the implant during the healing period.

Results

Recovery time is very fast as neither soft nor hard tissue is traumatized. Typically, even the day after implant placement there is no swelling, bruising or pain.

Conclusion

Zirconia is metal free and is biocompatible. No drilling or surgery, or bone augmentation, is necessary. The patient never needs a sinus lift. There is no discoloration through the gums, as is commonly seen with titanium implants.

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Abstract No: 0871
Intra Alveolar Distraction Osteogenesis

Dr. Dr.M.Jalapathi

Madha Dental College and Hospital

Abstract

Distraction osteogenesis (DO) is the technique of bone lengthening in which osteotomized bone is moved apart and there is new bone formation between the two separated bone ends. As defined by Ilizarov, the technique of osteodistraction utilizes own repair mechanism for formation of new bone. It is most commonly used for treatment of severe deformity and syndrome of both maxilla and mandible. Before the implant placement, alveolar distraction osteogenesis has been the technique for reconstruction of alveolar bone since 1996. This poster will describe the use of do (distraction osteogenesis within the alveolar ridge in order to increased the amount residual alveolar ridge for implant placement.

Abstract No: 0897
Socket Shield - Boon to Implantology

Dr. Manasi Bavaskar

YMT Dental College, Kharghar

Abstract

Socket shield – A boon to implantology objective- successful implant therapy is not merely a pursuit of osseointegration, but a full congregation of healthy and aesthetic tissues framing the prosthesis. Post-extraction there is an invariable loss of bone height, pdl, and notable soft tissue alterations. Hence, preserving peri-implant tissues is of paramount importance. This has established a cautionary approach of placing an immediate implant in lieu of extract, wait, augment, and insert the implant.

Method

Crown is decoronated. The proximal & palatal aspect of the root is sectioned and removed. A buccal portion is kept intact to ensure pdl vasculature supply. An implant is inserted in the socket followed by restoration that maintains soft tissue contours.

Conclusion

This partial extraction therapy is a highly promising, non-invasive technique that may significantly alter future management of failing dentition & post extraction ridge, viz a paradigm shift from extract & augment to salvaging patients own tissues.

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Abstract No: 0902
Assessment of peri-implant bone loss in two stage implant rehabilitation

Dr. Chaitali Kundu, Dr. Ravi Sekhar M., Dr. Yashavanth A

Daswani Dental College and Research Centre

Abstract

Background and Objectives

Dental implantology is now considered as an essential branch of oral and maxillofacial surgery, for the replacement of lost stomatognathic system. The survival of the implant in patient mouth is evaluated by the amount of bone loss in peri implant area. The purpose of this study was to analyze the amount of peri implant bone loss by taking the two major radiographs opg and cbct, after the functional loading of the prosthesis.

Materials and Methods

After clinical and radiological assessment, appropriate implants were selected on the basis of the length and width. Rule of 1,2,3 were followed surgically. The post operative follow-up were after 90 days and ogs were taken to assess the amount of osseointegration and the patient were subjected to prosthesis loading. After the completion of the loading procedure, check OPGS were taken to assess the proper seating of the abutments to the collar of the implants. Then patients were recalled after 1 year. To assess the bone loss, OPGS were taken to evaluate the mesio-distal bone loss and CBCTS for assessing the defect amongst the four walls. The actual implant length were known and compared with that of OPG and CBCTS images.

Results

The mesial bone loss and distal bone loss were almost similar at the immediate, post 1 year OPG and post 1 year cbct. Statistical analysis was done using paired t-test and Chi square test.

Conclusion

Although CBCT gives detailed picture of all the four walls with no magnification error, any bone loss of 0.5 mm at the collar level can be analysed easily with the OPG images but the role of CBCT cannot be ignored in certain cases where to the exact extent of bone loss has to be determined.

Abstract No: 0911
Role of onlay bone grafting in implantology

Dr. Bhaskar Roy

KVG Dental College & Hospital

Abstract

Background

Bone grafting is indispensable in restoring the bony defect in oral maxillofacial region. Autogenous bone graft is the gold standard in this race of restoring bony defects. There are many intraoral & extraoral sites from where we can harvest bone for restoring bony volume of these lateral ramus has an advantage of being cortical bone exhibiting little volume loss & shows excellent incorporation at short healing time.

Aim

Aim of the study is to evaluate the efficacy of autogenous lateral ramus bone graft & role of rigid fixation in reducing the resorption bone graft.

Methods

A case of rta resulting in dentoalveolar fracture in relation to 11 to 13 with extrusion of 12 which later led to periapical infection & pus discharge. Patient was treated with autogenous lateral ramus bone graft & fixation of harvested bone was done with screw & covered with collagen membrane after the infection was subsided.

Results

Lateral ramus autogenous bone graft was well taken up in the recipient site with satisfactory bone volume for future implant placement. Radiographic evidence shows marked reduction in bone resorption following autogenous bone graft.

Conclusion

Defects of alveolar bone following trauma necessities bone augmentation. The same can be achieved with a wide range of graft materials using rigid & non-rigid fixation, donor sites, and surgical approaches. An in-depth knowledge of fundamental surgical principles and a comprehensive understanding of available grafting materials will enable the oral and maxillofacial surgeon to achieve predictable and sustainable solutions to complex alveolar defects before restoration driven implant placement.

Abstract No: 0946
A novel technique - autogenous tooth particulate as a bone graft

Dr. Anshuman Dwivedi

I.T.S Dental College Muradnagar Ghaziabad

Abstract

Introduction.

Currently, all extracted teeth are generally considered clinical waste and, therefore, are simply discarded. Recently, however, several studies have reported that extracted teeth from patients, which undergo a process of cleaning, grinding, demineralization, and sterilization, can be a very effective graft to fill alveolar bone defects in the same patient. However, this procedure is extremely time-consuming since the graft is only ready several hours or days after extraction. This technique therefore, aims to present a modified procedure that employs freshly extracted teeth in a clinical setting by recycling them into bacteria-free particulate autogenous mineralized dentin for immediate grafting.

Material and method.

Teeth without root canal fillings, which have been extracted due to advanced periodontal bone loss or other reasons, such as wisdom teeth extraction or orthodontic indications, can be prepared for immediate grafting. Immediately after extraction, restorations like crowns and fillings should be cut off or removed. Carious lesions and dis-colored dentin, or remnants of periodontal ligament (PDL) and calculus should be reduced by 703 burr. The roots could be split in case of multi-rooted teeth. The particulate dentin from the drawer is immersed in basic alcohol for 10 min, in a small sterile glass container. The basic alcohol cleanser consists of 0.5 m of NAOH and 30% alcohol (v/v) for defatting, dissolving all organic debris, bacteria, and toxins of the dentin particulate.

Conclusion

Extracted teeth can become autogenous dentin, ready to be grafted within 15 min after extraction. We consider autogenous dentin as the gold standard graft for socket preservation, bone augmentation in sinuses, or filling bone defects.

Abstract No: 0954
Vertical ridge augmentation (VRA) in posterior mandible using titanium mesh and alloplast

Dr. Rahul Malik

Sudha Rustagi College of Dental Sciences and Research, Faridabad

Abstract

Various studies have been going on to vertically augment the posterior mandibular ridge. The ridge height available to place dental implants is often insufficient due to ongoing crestal resorption and presence of inferior alveolar canal in this region. The objective of our poster topic is to discuss better and more viable options for VRA. Also to discuss the use of alloplastic bone grafts instead of autografts for better patient compliance as autografts often leads to comorbidity and to highlight the use of titanium mesh as guided bone regeneration membrane instead of resorbable membranes thus providing more protection to grafts and also provides a rigid guide for bone formation.

Abstract No: 0960
Ligaplasts-tissue-engineered ligament implant

Dr. Neel Gupta

Institute of Dental Studies & Technologies

Abstract

Introduction

The combination of pdl cells with implant biomaterial is known as ligaplasts. The ability to use autologous dental progenitor cells (dpcs) to form organized periodontal tissues on titanium implants would be a significant improvement over current implant therapies. Periodontal ligament (pdl)-derived dpcs can be used to bioengineer PDL tissues on titanium implants. Pdl dpcs can organize periodontal tissues in the jaw, at the site of previously lost teeth, indicating that this method holds potential as an alternative approach to osseointegrated dental implants. It ensures that the formation of pdl collagen fibers oriented perpendicular to the implant might improve cementum formation on its surface.

Objective

Placement of ligaplasts can solve problems that conventional implants are commonly faced with such as gingival recession and bone defects of the missing tooth site.

Method

Ligaplasts can be applied in cases of periodontal bony defects, where the conventional implants can be installed. The cultured pdl cells that surround the implants will act as support and anchorage in the place of normal PDL.

Results

Ligaplasts as tooth replacement has decisive advantages as compared with osseointegration devices due to their property of periodontal tissue regeneration.

Conclusion

Ligaplasts is relatively easy, because the implant is not tightly fitted to its site. Patient may not have to undergo bone grafting, inconve-

nience and discomfort with the ligaplasts placement. The ligaplast system mimics the natural insertion of natural tooth roots in alveolar bone.

References

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Abstract No: 0981
Implant based dental rehabilitation after jaw reconstruction with FFF

Dr. Akhila K, Dr. Ravi V. (HOD and Professor), Dr. Shyamsunder M. (Professor), Dr. Girisanter, Dr. Jaeson Mohanan Painatt

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Abstract

Restoration of function and aesthetics remains an important and challenging problem in patients with facial deformity ensuring after jaw resection following tumour removal, traumatic injuries, congenital anomalies or severe atrophy. Oral rehabilitation is essential to restore altered oral functions affecting mastication, speech, swallowing, saliva retention, poor aesthetics due to loss of lip support and subsequent psychological problems. Among the reconstructive options for large and complex jaw defects, free vascularized bone flaps stand ahead with survival rate of nearly 90% or higher and free fibula flap has demonstrated high reliability and adaptability when compared to other free vascularised bone flaps such as iliac, scapula and radial forearm flaps in accordance with literature. Apart from the less reliable conventional prosthesis, oral implants show high success rate in oral rehabilitation with bone flaps. However, compromised implant survival occurs due to irradiation, thickened mobile and fragile soft tissues over flaps, inadequate bone flap height, poor oral hygiene, in old age patients, use of more osteotomised flap and use of machine surface implants. Many methods have illustrated in placing implants in reconstructed bone flaps such as implant placing between 4 months-12 months after reconstruction, implant placement after debulking flaps and reconstruct jaw with prior loading of implants in donor sites. All these techniques aim for reduced patient morbidity and to overcome disadvantages of conventional methods in jaw reconstruction and rehabilitation which improves patient overall well-being.

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Abstract No: 1064
Implant placement in fresh extraction socket of maxillary anterior region

Dr. Shri Krishna Prasanth

Al Badar Rural Dental College and Hospital

Abstract

Aims and Objective

To evaluate the immediate implant placement in fresh extraction socket of maxillary anterior region. To assess implant stability at third month after osseointegration. To evaluate pre and post operative papillary height.

Materials and Method

11 patients desiring replacement of one or more missing teeth in the maxillary anterior aesthetic zone were selected. Surgery for placement of implant was carried out and abutment was then attached. A temporary acrylic resin crown was fabricated and cemented on the same day. The permanent prosthesis was inserted in the third month after placement. Implant stability was measured using reverse torque test at the end of 3 months. Papillary height was measured from tip of mesial papilla to mesioincisal edge of adjacent mesial tooth and the tip of distal papilla to mesioincisal edge of adjacent distal tooth result: a clinical study was performed to evaluate the treatment outcomes of dental implant installed according to a 1 stage surgical procedure followed by immediate implant placement in fresh extraction socket with prosthesis. 10 out of 11 patient showed sign of successful osseointegration over a 3 months of follow up. There was statistically significant difference in the papillary level.

Abstract No: 1081
Effect of surgical techniques and thread designs on implant stability

Dr. Pandey Pritee Rajkumar

D. J. College of Dental Sciences & Research, Uttar Pradesh

Abstract

Tooth loss is a very common problem therefore the use of dental implants is common practice, although research on dental implant designs, materials and techniques has increased in past few years and is expected to expand in future, still lot of work involved in use of better biomaterials, implants design, surface modification and functionalization to improve the long term outcomes of treatment. This study provides a brief history and evolution of dental implants. It also describes the types of implants that have been developed, and the parameters that are presently used in the design of dental implants. Comparison is done between different surgical techniques and thread designs that includes tapered implant with symmetric thread design (pitch 0.71 mm), tapered implant with progressive thread design (pitch 2.4 mm), single pitch micro thread (0.8 mm), single lead thread (1.2 mm). Dental implant are typically screw shaped inserted into either the maxilla and mandible and serves to replace the tooth root. Screw thread type implants are most popular type of root implant due to their proven success and great initial retention. It reduces the chances of failure during the period of bone remodelling thus allowing for greater number of cases for immediate or early

loading while maintaining a high degree of predictability and successful treatment outcomes.

Abstract No: 1084
Bone metabolic marker levels in peri-implant crevicular fluid and rfa of implant stability in the early stage of healing in diabetic and non diabetic patients

Dr. Arjun raj, Dr. Shweta Ashok

Meenakshi Ammal Dental College

Abstract

Aim & Objectives

The aim of the study is the early prediction of the stability of implants in diabetic and non-diabetic subjects by correlating with the study of biomarker assay such as alkaline phosphatase (alp) and receptor activator of nuclear factor kappa b ligand (rankl) in the peri implant crevicular fluid prior to the prosthetic loading of the implants.

Materials and Methods

A prospective study of 20 patients, 10 patients with a history of diabetes mellitus (hba1c < 8 under medication) and 10 patients clinically healthy, with single missing mandibular posterior teeth. The patients received endosteal root form implants. All the patients were subjected to peri implant crevicular fluid collection and resonance frequency analysis for implant stability measurements on day 1, day 30 and day 90 post implant placement.

Results

This study showed that all the implants placed in the diabetic group and non-diabetic group attained stability and successful osseointegration as indicated by the biochemical assay and implant stability quotient. But the implants placed in the diabetic group required more critical monitoring and longer duration to complete the healing cascade. More importantly, maintaining the blood sugar levels under control during the post placement healing period is also vital for success of the procedure.

Conclusion

This study of biomarker assay in the peri implant crevicular fluid gives a scientific guideline to the predictability of implant uptake in diabetic and non-diabetic patients. The results of our study have further confirmed that diabetes mellitus with good to average glycemic control is not an absolute contraindication for dental implant placement. The rate of healing is prolonged in patients with diabetes compared to non-diabetic patients which necessitates delayed loading of the implants with the prosthetic component.

Abstract No: 1115
Evaluation of efficacy of basal osseointegrated implants in restoration of atrophied ridges

Dr. Navya Keerthana R

The Oxford Dental College, Bangalore

Abstract

Evaluation of efficacy of basal osseointegrated implants in restoration of atrophied ridges background: dental implant is a prosthetic device

of alloplastic material implanted into the oral tissues beneath the mucosa and/or periosteal layer and on/or within the bone to provide retention and support for a fixed or removable prosthesis; a substance that is placed into and/or upon the jawbone to support a fixed or removable prosthesis. Treatment using the placement of dental implants require adequate bone width and bone height. When these conditions are not present additional surgical procedures are necessary to create adequate bone volume. Different surgical techniques can be performed to reconstruct the alveolar ridge like guided bone regeneration (gbr), block bone grafting (bbg) and distraction osteogenesis (do). Basal implants utilize horizontal, oblique and vertical bone support. They can be implanted under all anatomical conditions, even immediately post-extraction. There is no requirement of bone augmentation procedures and sinus lifts, thus, shortening the total duration and expense of the treatment.

Aim

The aim of this presentation is to evaluate the efficacy of basal osseointegrated implants in restoring atrophic ridges where patients are partially edentulous for multiple years.

Discussion

The various parameters assessed to evaluate the efficacy of basal implants are: post-operative pain rigid fixation post-operative bone loss.

Abstract No: 1116

Basal Implant

Dr. Sadaf Rahman

Shree Bankey Bihari Dental College

Abstract

Abstract

Background

Basal implantology also known as biocortical implantology or cortical implantology. It is a modern implantology which utilizes the basal cortical portion of jaw bone or retention of the dental implant which are uniquely designed to be accommodated in the basal cortical area. The basal bone provides excellent quality cortical bone for retention of these unique and highly advanced implants.

Aim

Rehabilitation of edentulous jaw by placing basal implants.

Method

A 28 year old patient reported to the department of oral and maxillofacial surgery with chief complaint of mobility of teeth in his lower anterior region of jaw. The patient wanted to have treatment done in minimum time by the least traumatic and fixed option. Thus we had chosen to rehabilitate the patient with basal implant after extraction of 31, 32 and 41.

Results

Patient was treated with immediate loading of basal implant in 31, 32 and 41 with no post operative complication.

Conclusion

Basal implant is minimally invasive, which gives better cortical support in case of deficient bone. Basal implants are used to support single and multiple unit restoration in upper and lower jaw. They can be placed either in extracted socket or in the healed bone.

Abstract No: 1125

Urticaria and Dental Implants

Dr. A. Bhagya Mathivanan

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Abstract

Dental implants have revolutionarized the field of dentistry. Earlier the missing teeth were replaced by either removable or fixed partial dentures but nowadays dental implants have evolved a new treatment modality for majority of the patients and expected to play a significant role in oral rehabilitation in future. A dental implant is an surgical component that interfaces with bone of jaw and skull to support a dental prostheses. Dental materials for implant need to be selected very carefully. Choices of material usually depends on factors such as corrosion behaviour, mechanical properties, cost, availability, biocompatibility and aesthetic appearance. Since 1960's, titanium has developed into a well accepted metallic biomaterial due to its unique properties with biomechanical applications and high strength. It has been recommended that hypersensitivity reaction due to titanium implants is of concern for implant longevity. There seems to be frequent clinical complications and cutaneous hypersensitivity allergic reactions(type 1 and type 4) to the dental implant material.

Abstract No: 1129

Temporomandibular Joint Pain

Dr. Ramesh Kumar Gupta

Shree Bankey Bihari Dental College, Ghaziabad

Abstract

Background

Prolotherapy is also known as proliferative/regenerative injection therapy involves injections in the tendon and ligament insertion with a medicament that stimulates proliferation of fibrous tissue, to repair and stabilize the fibro-osseous junction. It is now a days frequently used in temporomandibular disorder in oral and maxillofacial surgery.

Aim

To relieve the temporomandibular joint pain.

Method

A 30 year old female patient reported to the Department of OMFS, SBB Dental College, Ghaziabad, with a chief complaint of Tmj pain and decrease mouth opening since 2 months. On inspection revealed TMJ pain, radiologic investigation included O.P.G. we injected 0.75ml of 15% dextrose injection in TMJ on the right side & pain was relieved.

Result

Patient was relieved from pain and clicking sound.

Conclusion

In our study we are using a minimally invasive, regenerative injection therapy (prolotherapy) which has been used to relief TMJ pain and stabilize injured joints. This technique is used to strengthened and rejuvenate weak tendons, ligament and also resolve the joint laxity, as a result patients problem of discomfort, pain and loss of function are resolved.

Abstract No: 1152
Versatility of PRF in implant placement in localised ridge defects

Dr. Birsuhra Roy

Faculty of Dental Sciences, SGT University

Abstract

Background

Resorption of edentulous or partially edentulous ridge or bone loss due to periodontitis or trauma frequently compromises dental implant placement in a prosthetically ideal position. Therefore, augmentation of an insufficient bone volume is often indicated prior to or in conjunction with implant placement to attain predictable long-term functioning and aesthetic treatment outcome. Platelet rich plasma (PRP), an autologous concentrate of platelets offers improved quality and healing speed for both hard and soft tissues. But as use of plasma concentrate alone cannot be recommended as they are not stable and cannot withstand chewing forces and movements therefore, mineralised plasmatic matrix (MRP) solve this problem by using plasma concentrate along with bone allograft for better stability of the graft. As PRF plays significant role in wound healing we have attempted to assess PRF role along with demineralised freeze-dried bone allograft for ridge augmentation.

Objective To provide a clinical and radio graphical evaluation of ridge augmentation procedure using mpm along with PRF membrane in immediate implant placement.

Materials and Methods

The study was conducted in 20 patients divided into two groups with 10 patients each. Implant placement was done in deficient bone in maxilla and mandible using 2 stage immediate implant placement covering the defect with mpm and prf membrane.

Results

Postoperatively clinical parameters studied were pain, infection and dehiscence of implant manually and radiographically at 1 week, 4 months and 6 months follow-ups. Stability of the implant were evaluated using osstell radiofrequency analyser.

Conclusion

Implants placed in compromised alveolar ridges along with MPM and PRF membrane, delimiting small circumferential defects by use of biomaterials which act by releasing high-concentration growth factors to the wound site, thereby stimulating healing and new bone formation. In contrast to traditional techniques, it allows for implant placement and eradicates the possible morbidity from a second surgical procedure.

Abstract No: 1155
Osseodensification, a bio-mechanical implant site preparation technique

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Government Dental College and Research Institute, Bangalore

Abstract

Osseodensification(OD) is a novel bio-mechanical implant site preparation technique. It is a nonextraction technique for placing implants which was developed and made possible with specially

designed burs to increase bone density as they expand an osteotomy. It produces low plastic deformation which preserves the bone to enhance the host. These burs claim to combine advantages of osteotomes with the speed and tactile control of the drilling procedures. Standard drills remove and excavate bone during implant site preparation; while osteotomes preserve bone, and tend to induce fractures of the trabeculae that require long remodeling time and delayed secondary implant stability. These burs allow bone preservation and condensation through compaction autografting during osteotomy preparation, increasing the periimplant bone density. Bone tissue is simultaneously compacted and autografted in an outwardly expanding direction to form the osteotomy. It utilizes a multi-fluted bur technology that creates and expands a pilot hole without excavating significant amounts of bone tissue. According to the manufacturer, these special burs demonstrated the ability to expand narrow bone ridges similarly to split crest techniques. The bur geometry, rotating in reverse mode allows to compact the bone along the inner surface of the implant osteotomic site without cutting. The rationale is that compacted, autologous bone immediately in contact with an endosteal device will not only have higher degrees of primary stability due to physical interlocking between the bone and the device, but also facilitate osseointegration due to osteoblasts nucleating on instrumented bone in close proximity to the implant. Thus promising to provide better implant stability and shorten the treatment time. This e-poster demonstrates a case report of utilization of this relatively new bur technology for placement of implant.

Abstract No: 1164
Modified Bony Lid Technique in Implants

Dr. Axadevsinh D. Pargara, Dr. Anil Managutti

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Abstract

Background the fracture of a dental implant is not a common phenomenon, still this type of complication can cause significant problems in removing the fractured implant and the resultant ridge defects, in addition to needing to modify the prosthetic appliance. In addition, there may be nearby anatomical structures such as roots, nerves, floor of the nasal cavity, other implants, and the maxillary sinus that may increase the risk for removal. The bony lid technique used in apical root resection of mandibular molars, extractions, excision of tumors, and for the removal of the implants. Modifications to the bony lid technique included restricting the size of the bony lid, use of a long shank drill, performing guided bone regeneration, immediate implant placement, and providing rigid fixation. Procedure traditionally, osseo integrated implants requiring removal would be removed using a trephine drill, which is the standard technique for removing fractured implants. However, there are significant limitations to this technique. But where the alveolar ridge is thin and narrow, placing a larger diameter implant is not possible without concomitant loss of significant labial or lingual cortical bone. Advantage many advantages over the traditional methods for implant explantation such as using a trephine to remove the implant. Restricting the size of the bony lid, use of a long shank drill, performing gbr, immediate implant placement, and providing rigid fixation. Also reduce the loss of existing bone and to preserve the explantation socket, thus minimizing the bony defect, reducing treatment time, and improving patient outcomes.

Reference

1. Soong-ryong Jung, Department of Biologic and Materials Sciences, 1030 Dent, School of Dentistry, University of Michigan.

Abstract No: TR2404
Bidirectional Distraction Osteogenesis in Cleft Maxilla

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Abstract**Introduction**

Hypoplasia in cleft maxilla is always a challenge. Maxillary advancement using traditional le-forte I osteotomies may place these patients at risk not only for skeletal relapse but also for the development of velo-pharyngeal insufficiency and scarring. Using a hyrax with a buccal hook we can achieve both maxillary transverse expansion and horizontal advancement simultaneously, without compromising the velo-pharyngeal competence.

Aims and Objectives

This report aims to describe the management of severe maxillary retrusion and constriction in cleft lip and palate patients using distraction osteogenesis applied in serial sequence in two directions perpendicular to each other.

Materials and Methods

Cleft lip and palate patients were treated with maxillary distraction osteogenesis devices to enable expansion in horizontal and vertical planes simultaneously. Sub-apical lateral osteotomy cuts made in the maxilla allowed for the biplanar distraction forces to be applied perpendicular to each other using a tooth borne expansion device.

Conclusion

Sequential serial distraction of maxilla in two planes perpendicular to each other is a safe and stable approach for the treatment of cleft lip and and palate patients with severe transverse and anteroposterior discrepancies. The above mentioned method enables the same in a single procedure.

Abstract No: TR3553
Reconstruction of mandibular condyle, a long term followup over twenty years

Dr. Ashish Gupta

Krishnadevaraya College of Dental Science and Hospital, Bangalore

Abstract

Hemi mandibular resection has been the choice of treatment for various pathological conditions affecting the mandible there are various options available to reconstruct the resected mandible, such as, reconstruction plates, bone graft and free flaps. This is a study that shows the long term results in patients who have undergone hemimandibular reconstruction with reconstruction plates over a span of 20 years.

Abstract No: TR5109

Bone grafting in primary and secondary traumatic mandibular defects

Dr. Asmita Unadkat

Manipal College of Dental Sciences, Manipal

Abstract

Different techniques and materials (bone grafting and bone graft materials) are currently used to treat fractures, malunions and bony deformities. The goal of management of the same, is the return of function and esthetic as quickly and completely as possible.

we present a successful case management of a patient with post traumatic surgical mandibular continuity defect in relation to left parasymphysis/body region and malunion of left parasymphysis fracture stabilized with a non vascular iliac bone graft. The procedure positively improved the quality of life in our patient with regards to her aesthetics, speech and function. This treatment approach could be considered in similar cases to achieve predictable outcomes.

Aims and Objectives

To study success rate of iliac bone graft to treat post traumatic surgical mandibular deformities and malunion.

Abstract No: TR8501

Socket- shield technique in immediate implant placement

Dr. Sikha Joseph, Dr. Harish Kumar A, Dr. Mueedul Islam

The Oxford Dental College and Hospital

Abstract

Evaluation of buccofacial bone height in immediate implant placement with and without socket shield technique using cone beam computed tomography an experimental study background the alveolar bone undergoes a remodelling process which leads to horizontal and vertical bone loss after tooth extraction. Various methods of guided bone regeneration (GBR) have been described to retain the original dimension of bone after extraction.it has also been suggested that resorption of buccal bundle bone can be avoided by leaving a buccal root segment(socket - shield technique)in place, because the biological integrity of the buccal periodontium(bundle bone) remains untouched.

Aims

The aim of this presentation is to evaluate & compare the buccofacial bone height in immediate implant placement with & without socket-shield technique.

Material & Methods

The study was conducted on 16 patients who required immediate implant placement. 2 groups have been selected, (1) experimental group 8 patients with socket -shield technique and control group (2) 8 patients without socket shield technique. In both the groups 4 CBCTS were carried out conclusion in the current study we have found implant placement using socket shield technique have significant reduction in bone loss compared to conventional placement.

Abstract No: TR8835

Challenges in Pediatric Orbital Fracture

Dr. Koustabh Kumar

Krishnadevaraya College of Dental Sciences

Abstract

Aim

To evaluate complexities during intraoperative and post operative management of pediatric orbital fracture.

Introduction

Pediatric orbital fractures are quite rare and mostly due to fall and sports related injuries managing it becomes more difficult due to the anatomy and patient co-operation towards treatment. Traumatic involvement of the frontal bone and superior orbital rim are more common in children, especially under the age of 5 years due to the increased ration of cranial vault to facial skeleton. The vast majority of these fractures are treated with observation only. Early surgical intervention is recommended in children with orbital muscle entrapment.

Conclusion

These injuries definitely deserve special consideration because surgical or observational management may result in preserving vision.

Category – Dentoalveolar Surgeries Nerve Injuries

Abstract No: 0199

2D radiography versus cbct in localisation and surgical treatment planning of maxillary impacted canine

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Dept of OMFS, Government Dental College Kottayam

Abstract

Background and rationale

Canine impactions are very frequent and the frequency of surgical removal or orthodontic retrieval has increased. In case of canines that are deeply impacted within the maxilla, plain radiographs may not be able to accurately localize the tooth. In such cases cbct can be used as an alternative.

Aims and Objectives

To assess whether there existed any difference in accuracy of localization and treatment planning for impacted maxillary canines when using a set of plain radiographs-a set of occlusal and an iopa radiograph and a cbct image.

Methods

A total of 20 patients with impacted maxillary canines whose positions were difficult to determine with clinical examination or with simple radiographs like iopa radiograph and occlusal were included in the study. Three faculty members completed a questionnaire for every impacted canine and diagnostic radiographic modality (2d and 3d) for each tooth studied.

Results

The data showed that the judges produced different decisions regarding localization depending on the radiographic method. There

was no significant disagreement regarding mesiodistal location, vertical location, follicle size or presence or absence of root resorption. However there was 37% disagreement in proposing the appropriate surgical approach to be used which is a direct indicator of the labiopalatal location of the cusp tip.

Conclusion

The results show that there is a significant difference in treatment plan (surgical approach) when plain radiographs and cbct images were compared. There is a higher rate of agreement when using cbct which suggests that it can be used for accurate localization of deeply impacted teeth.

Key Articles

Liu DG, Zhang WL, Zhang ZY, Wu YT, Ma XC. Localization of impacted maxillary canines and observation of adjacent incisor resorption with cone-beam computed tomography. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2008; 105:91–8.

Abstract No: 0285

Marsupialization of large mandibular dentigerous cysts: three case reports

Dr. Norio Kuroyanagi

Department of Oral and Maxillofacial Surgery, Hekinan Municipal Hospital

Abstract

Background

Dentigerous cyst (DC) is the most common type of odontogenic cyst. Marsupialization is the treatment choice for the large DC because enucleation would carry a risk of sacrifice the impacted permanent teeth, trauma to the inferior alveolar nerve. This report presents three large DCS in the mandible. They were treated successfully by marsupialization with secondary enucleation.

Objectives

Case 1 - a 12-year-old boy was referred to our hospital. Radiographic examination showed a well-defined osteolytic lesion measuring 10 cm in diameter, surrounding the permanent mandibular right canine to the left second molar, and displacing the left first and second premolars to the lower border of the mandible. After diagnosis of a dc, marsupialization was performed. Thirty-one months after marsupialization, orthodontic treatment was started. Seventy-two months after marsupialization, such procedure made the extrusion of the impacted tooth toward the normal position.

Case 2 - a 38-year-old male patient with a well-defined osteolytic lesion measuring 3.5 cm in diameter, surrounding the permanent mandibular right second molar, and displacing the right third molars. After diagnosis of a dc, marsupialization was performed. Nine months after marsupialization, enucleation of the residual cyst was performed afterwards with impacted tooth removal.

Case 3 - a 15-year-old female patient with an osteolytic lesion measuring 3 cm in diameter on the right side of the mandibular ramus. After diagnosis of a dc, marsupialization was performed. Four months after marsupialization, enucleation of the residual cyst was performed afterwards with impacted tooth removal.

Conclusion

The final result of treatment in tree cases were uneventful healing of the DC. Especially in case 1, the combination of marsupialization with orthodontic extrusion is a conservative, efficient protocol that preserves cyst-associated teeth and promotes their eruption and bone healing.

Abstract No: 0364**Pregabalin in the treatment of inferior alveolar nerve injury and neuropathic pain following extraction of mandibular 3rd molar**

Dr. Hrushikesh Gosai, Dr. Sonal Anchlia, Dr. Utsav Bhatt, Dr. Zaki Mansuri

Govt. Dental College & Hospital Ahmedabad, Gujarat

Abstract**Background introduction**

A case of chronic intraoral neuropathic pain & inferior alveolar nerve injury following the extraction of mandibular left 3rd molar before 2 years; previously misdiagnosed as trigeminal neuralgia and treated presently with pregabalin & multivitamins including cynocobalamin is described.

Objectives

To describe a case of inferior alveolar nerve injury after extraction of left mandibular 3rd molar with resolution of chronic pain, hyperalgesia and paresthesia after a non-surgical approach, including treatment with pregabalin & multivitamin and cyanocobalamin.

Method

This case with chronic neuropathic pain due to IAN nerve injury before 2 years came to dept.of oral & maxillofacial surgery,gdch,ahmedabad,gujarat. Carbamazepine 200 mg bd for trigeminal neuralgia was discontinued and treated non-surgically with pregabalin 75 mg 1 tab hs and multivitamins-thiamine mononitrate 10 mg, riboflavin 10 mg, pyridoxine hydrochloride 3 mg,cynocobalamin 15 mcg, nicotinamide 45 mg & calcium pantothenate 50 mg 1tab hs.patient was kept on regular periodic follow up.

Result

A significant improvement in initial days after the medical treatment was found. No pain on palpation was present at left mandibular third molar region; hyperalgesia and paresthesia were improved in 15 days. Overall condition of patient improved gradually.

Conclusion

The complete resolution of chronic neuropathic pain, paresthesia and improvement in hyperalgesia achieved suggests that a non-surgical approach, combining the gaba analogue pregabalin and multivitamins including cynocobalamin is a good option in the management of the nerve injury. Proper diagnosis is of utmost importance in cases of chronic orofacial pain to prevent misdiagnosis and failure to improve patient condition.

Keywords Inferior alveolar nerve, neuropathic pain, paraesthesia, pregabalin.

Abstract No: 0376**Flap designs used in extraction of impacted mandibular third molar**

Dr. Jasbinder Kumar, Dr. Jasbinder Kumar

M. R Ambedkar Dental College

Abstract**Background**

Third molars are present in 90% of the population with 33% having at least one impacted third molar. Thus surgical removal of impacted

third molars is frequently performed procedure. Flap design is important for allowing optimal visibility and access to the impacted tooth and also for subsequent healing of the surgically created defect. Different flap designs used are 1)wards incision 2)modified wards incision 3)bayonet flap 4) envelope flap 5)comma incision.

Aim

Evaluation of different flaps design used in surgical extraction of impacted mandibular third molar.

Materials and Methods

A randomized comparative prospective study was done which includes patients of age between 20 and 40 years of age. Inclusion criteria consisted of patients with no medical history of any illness or prolonged medication that could influence the course of post operative wound healing.intra oral flushing was done with 5% betadine followed by flushing with normal saline.

Conclusion

The selection of the flap design is dependent on needs of the case and preference of the operating surgeon and does not seem to have a significant influence on health of tissues.

Abstract No: 0429**Modern concepts in facial nerve reconstruction**

Dr. Vakil Samyak Rajivbhai

Bapuji Dental College and Hospital

Abstract

Peripheral facial nerve palsy is the most common pathology of the cranial nerves with an incidence ranging from 20 to 30 cases per 100000 people per year. With 60–75% of cases, the major cause for facial nerve palsy is idiopathic or bells palsy. The term facial nerve palsy summaries incomplete loss as well as complete loss of facial nerve function. Permanent facial palsy and non transient functional deficits are the main indication for surgical reconstruction of the facial nerve function. Intention of surgical reconstruction is to restore the function of the mimic musculature as optimal as possible. Elecromyogram and MRI plays an important role in evaluation of facial palsy. Various techniques include direct facial nerve suture, facial nerve interpositional graft, hypoglossal facial nerve jump nerve anastomosis, dynamic muscle transfer or sling plasties. Tissue engineering using nanotechnology to engineer scaffolds mimicking natural tissue properties, possibly encapsulating schwann cells to enhance nerve repair and sustained release of neurotrophic factors are possibilites. The advent of successful allograft facial transplant presents a possible future treatment for facial reanimation.

Abstract No: 0611**Facial paralysis: a review of treatment options**

Dr. Pooja Gopal Choudhary

Goa Dental College and Hospital, Bambolim

Abstract

Facial paralysis is one of the most distressing and disfiguring symptoms that not only poses a diagnostic but also a therapeutic challenge

to the oral and maxillofacial surgeon from both the esthetic as well as functional stand points.

Aim

Because speech, mastication and expression of words and emotions are based on the ability to move facial musculature, be it voluntary or involuntary, successful treatment of facial nerve paralysis is a vital concern.

Materials and Methods

This poster highlights the different treatment options available to the oral and maxillofacial surgeon be it mechanical, surgical or physical in dealing with the complex conditions, the cause of which are multifold i.e., idiopathic, traumatic, congenital, infective etc.

Conclusion

Thorough clinical evaluation including electrophysiological testing helps in assessing the aetiology and severity of the palsy and chose appropriate medical and surgical treatment which should be individualised to suit a particular patient. With the recent advances in surgical treatment options for managing facial palsy, good restoration of both esthetic and functional outcomes is made possible.

Abstract No: 0618

Suturing after third molar surgery -knotless vs vicryl

Dr. Ramkumar Ceyar. K. A, Dr. Elavenil, Dr. Guruprasad, Dr V. B. Krishna Kumar Raja

SRM Dental College Ramapuram

Abstract

Aim

To assess the effectiveness of knotless suture in achieving wound closure and comparing the wound healing and wound strength following closure of incisions for third molar surgery, in comparison with 4–0 vicryl sutures.

Method

Twenty-four patients who reported to the department of maxillofacial surgery who required clean surgical incisions for tooth impaction were recruited for the study. Wound closure following tooth removal was done using knotless suture in the study sample and 4–0 vicryl on the control samples. The primary outcome measures were (1) the time taken to achieve wound closure and (2) postoperative wound healing and wound strength. Statistical analysis sample allocation was done by simple randomization. Data analysis involved descriptive statistics and paired t-tests ($p < 0.05$). Ibm spss software (v.20.0) was used for the data analysis. The study group demonstrated a statistically significant reduction in duration to achieve wound closure ($p < 0.001$) in comparison with the control group. The study group also exhibited significantly improved wound healing ($p < 0.001$).

Conclusion

Knotless suture is a worthy alternative to wound closure in comparison to vicryl sutures. No adverse effects of knotless suture were observed.

Abstract No: 0637

Efficacy of 3D imaging over 2D imaging for better neurological outcome - post surgical extraction

Dr. Padma Priyanka Datla

Sibar Institute of Dental Sciences, Guntur

Abstract

Background

Dysfunction of inferior alveolar nerve after extraction of mandibular molars is one of the most undesirable complication and is very distressing for the patient. Standard pre-operative evaluation usually relies on panoramic or intra oral periapical radiographs (IOPA), examined for signs indicative of increased risk of damage to nerve (rood's criteria). In spite of thorough planning nerve damage has reported to be inevitable in few cases.

Aim

To evaluate the efficacy of cbct over 2 dimensional imaging techniques for better neurological outcome following third molar surgical extraction.

Method

After a thorough preoperative radiographical assessment by 2D imaging, the high risk cases (as in rood's criteria) are subjected to 3D imaging techniques. The possibility of determining the direction of luxation and extraction cannot be done only by panoramic imaging. For instance, based on 2D imaging, approach usually starts on buccal side even in cases of lingually placed nerve, thereby resulting in unfavourably directed forces. 3D imaging aids the surgeon to determine the risk of post operative sensory impairment and modifying the surgical technique to lessen the risk of nerve injury.

Results

CBCT is thus the most appropriate option as it makes possible to perform accurate diagnostic imaging with a reduced radiation dosage compared to conventional CT.

Conclusion

To conclude cbct is the most effective way of determining the relationship between the inferior alveolar canal and third molar when compared to panoramic imaging or iopa.

References

1. kenji Nakamori, Kumiko Fujiwara, Clinical assessment of the relationship between the third molar and the inferior alveolar canal using panoramic images and computed tomography, J Oral Maxillofac Surg 66:2308–2313, 2008.

Abstract No: 0728

Protection of intra oral surgical site with a novel intra oral dressing material – a prospective study

Dr. R. Savitha Lakshmi, Dr.Elavenil Dr.Krishnakumar Raja

SRM Dental College, Ramapuram

Abstract

Post operative infection of surgical wound is a common phenomenon in maxillofacial scenario. One of the common reasons of infection of intraoral wounds is contamination of surgical site with food debris, microbial colonization & saliva. Protection of intra oral surgical site is challenging due to the following reasons; intake of food & moist

environment. This poster would highlight the efficacy of a novel intra oral dressing material that would protect the surgical site & minimizes the complication.

Abstract No: 0729

Comparison of Storage Media for Maintaining Periodontal Ligament Cell Viability

Dr. Bright E C, Dr Varghese Mani, Dr Sankar Vinod, Dr Arun George, Dr Ninan Thomas

MAR Baslios Dental College

Abstract

The aim of the study is the comparison of ability of various storage media to maintain the viability of pdl cells of stimulated avulsed teeth. The storage medias that were used are low fat cow milk, tender coconut water, saliva, ors, and hbss. The tooth selected were the premolars after therapeutic extraction for orthodontic purpose. This was an cross sectional study with sample size of 15 teeth on each media. The extracted teeth were placed in corresponding media for 20 min after which the tissues are scraped off and kept in trypsin(125 mg in 50 ml) for 30 min. This tissue-trypsin mix was centrifuged at 1500 rpm for 5 min. The supernatant obtained is mixed with fresh hbss to which trypan blue is added. with the help of hemocytometer and microscope the proportion of dead cells(stained blue) and vital cells(cells with blue borber) was counted.

References

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Abstract No: 0795

An observational study for localization of temporal and marginal mandibular branch of facial nerve in indian cadavers

Dr. MD Mahbul Hoda

Vydehi Institute of Dental Sciences & RC

Abstract

Introduction

Facial nerve injury and subsequent paralysis of facial musculature following trauma or surgery involving maxillofacial region is the most common complication. Facial nerve injury may have devastating effects on function, aesthetics and the social interaction of the affected patients. Much energy has been devoted to reliably deter-

mining landmarks to predict the course of the facial nerve divisions. Yet there is little regarding reliability of various landmarks. The purpose of this study is to observe the variation in the course of frontotemporal and marginal mandibular branch of the facial nerve in indian cadavers, by using fixed anatomical landmarks.

Materials and Method

This is an observational study, done on 30 hemi faces of 15 embalmed cadavers results: in all the cadavers the temporal branch of the facial nerve was running superficial to the zygomatic arch in temporoparietal fascia and was always running lateral and superior to lateral canthus of the eye. In eleven cadavers the marginal mandibular branch of the facial nerve was running superior to the lower border of the mandible in relation to mental foramen and supplying the perilabial muscles. In all cases the nerve was superficial to facial artery and the vein.

Conclusion

Course and variations of the facial nerve in relation to fixed anatomical landmarks can guide the surgeon to avoid facial nerve injuries and further postoperative complications. Fixity of the soft tissue in and around the facial nerve in cadavers can result in slight variation of its course, when compared with clinical presentation. Hence more studies are required to compare the variation in the cadaveric dissection and the clinical presentation of the temporal and marginal mandibular branches of the facial nerve.

Keywords Facial nerve, cadaver, temporal, marginal mandibular, anatomical landmarks.

Abstract No: 0901

Applications of PRF in Oral Surgery

Dr. Abhinandan Upadhyay, Dr. Arvind R

Manipal College of Dental Sciences, Mangalore

Abstract

Introduction

PRF (platelet rich fibrin) is a newer platelet concentrate. It is an advanced regenerative modality available nowadays and it functions by creating an effective three-dimensional tissue matrix or engineering scaffold to help wound healing as well as stimulate joint cartilage regeneration. It is a fibrin meshwork, in which platelet cytokines, growth factors, and cells are entrapped and discharged after a period and serve as a resorbable film PRF is an evolution of the fibrin adhesive, which is widely used in the oral surgery. The new prf-based matrices are known to play an important role in the process of wound healing and new tissue formations PRF is derived from patients own peripheral blood with single step, centrifugation system.

Objectives

The objective of the presentation would be to highlight effectiveness of PRF as new regenerative modality giving maxillofacial surgeons an alternative in tissue regeneration which is cost effective and easy to procure with minimum armamentarium.

Methodology

The e-poster would be focusing on the usefulness of prf as a regenerative material for clinical cases of oral implantology, minor oral surgery. A literature review of the various clinical applications of prf has been done.

Conclusion

Platelet rich fibrin (PRF) is a regenerative material whose source and beneficiary is the patient and at the same time it is cost effective.

References

1. Kiran NK, Mukunda KS, Tilak Raj TN (2011) Platelet concentrates: a promising innovation in dentistry. *J Dent Sci Res* 2: 50–61.
2. Gupta V, Bains BK, Singh, Mathur, Bains R (2011) Regenerative potential of platelet rich fibrin in dentistry: literature review. *Asian J Oral Health Allied Sci* 1: 22–28.

Abstract No: 0910 Trigeminal Neuralgia -treatment Modalities

Dr. Pallavi Priyadarshini

Buddha Institute of Dental Sciences and Hospital

Abstract

Background

Trigeminal neuralgia (TN) is defined by the international headache society (IHS) as unilateral disorder characterized by brief electric shock-like pains, abrupt in onset and termination, and limited to the distribution of one or more divisions of the trigeminal nerve [international headache society, 2004]. The IHS suggests a classification of TN as either classic (essential or idiopathic) TN (CTN) or symptomatic TN (STN; pain indistinguishable from that of CTN, but caused by a demonstrable structural lesion other than vascular compression). The diagnosis of CTN requires the absence of a clinically evident neurological deficit.

Aim

To determine the treatment modalities of trigeminal neuralgia in numerous patients according to their severity.

Methods

In this review we summarize current knowledge about the established treatment options for TN on the basis of recent reports of the quality standards subcommittee of the American Academy of Neurology (AAN) [Gronseth et al. 2008] and the European Federation of Neurological Societies (EFNS) [Cruccu et al. 2008]. An additional Medline search (25 August 2009) for articles was performed using the search term trigeminal neuralgia.

Conclusion

Among the very many diagnostic and treatment options in the management of TN only very few have proven their efficacy to modern evidence-based medicine standards. For thorough and accurate management, a stepwise diagnostic and treatment approach is recommended. In most cases the diagnosis can be made clinically. Bilateral involvements of the trigeminal nerve or sensory deficit are suspicious of STN and routine imaging (MRI) may be considered.

Abstract No: 0948 Study of extra-cranial course of facial nerve and its variations

Dr. Samujwal Das

Guru Nanak Institute of Dental Science and Research

Abstract

Facial nerve is seventh cranial nerve, which is a mixed nerve with a small sensory and motor roots. It emerges from brain stem between

pons and medulla. It is the nerve of 2nd branchial arch (hyoid). Course of facial nerve can be divided into intra and extracranial. After leaving the skull through stylomastoid foramen it enters the postero-medial aspect of parotid gland and runs through the gland and splits into two trunks temporofacial and cervicofacial trunk. Temporofacial trunk divides into two branches temporal and zygomatic. Cervicofacial trunk divides into three branches buccal, marginal mandibular, cervical all these terminal branches innervate muscles of facial expression. Generally after coming through stylomastoid foramen it pierces the postero medial surface of parotid and runs through the substance of the gland superficial to retromandibular vein but sometimes it is found deep to the vein. Many incisions and procedures in oral and maxillofacial surgery cross the extra-cranial course of facial nerve. Thus it is important for us to know the extra-cranial course along with its variations to avoid injury to facial nerve many researchers have described the specific and objective guidelines while placing the incisions. The purpose of my poster is to describe the extra-cranial course of facial nerve and its variations so that there will be a clear idea where to place the extraoral incision to avoid injury to facial nerve as it emerges from the parotid gland.

Abstract No: 0998 Efficacy of hydroxyapatite and prp in bilateral mandibular impaction

Sree Balaji Dental College & Hospital

Dr. Ravi Ganeshwar

Abstract

Healing of bone is a complex process which involves participation of many cell types and growth factors. The healing of fracture or wound is accomplished by the interaction of osteoblasts and extracellular matrix under the influence of various growth factors of which some are secreted by platelets. These factors can activate the proliferation and differentiation of the local osteoprogenitor cells into bone forming cells leading to the formation of new bone matrix and mineralization. Platelet rich plasma (PRP) is an autologous concentrate of platelets suspended in plasma. It is a proven source of growth factors like platelet derived growth factor (PDGF) and transforming growth factor (TGF)- β 1 & 2. Porous hydroxyapatite (HA) material has been used to fill the bone defects, which has resulted in clinically acceptable responses.

Abstract No: 1061 Platelet concentrates - bioengineering dentistry's regenerative dreams

Dr. Anshalika Agrawal

Hitkarini Dental College and Hospital

Abstract

Aim

To assess the potential use and benefits of platelet-rich fibrin (PRF) over platelet-rich plasma (PRP), for wound healing post third molar extraction.

Method

The poster describes the evolution of this first and second generation platelet concentrate and its benefits. PRP and PRF are prepared. Cavities filled with PRP and PRF after extraction procedures, at the institute, showed faster healing in half the time as compared to physiologic healing. PRP and PRF are compared in our study.

Conclusion

PRF, which belongs to a new second generation of platelet concentrates, with simplified processing, and not requiring biochemical blood handling, has several advantages over traditionally prepared prp, which has been widely used for accelerating soft tissue and hard tissue healing.

Abstract No: 1105**Double vision after inferior alveolar nerve block - rare occurrence**

Dr. R. Sathya Bhama, Prof. Dr. Prasad C, Prof. Dr. Balaji J, Associate Prof. Dr. Arun Kumar, Assistant Prof. Dr. Senthilkumar A

Government Dental College Chennai

Abstract**Background**

Inferior alveolar nerve block (IAMB) is a common & safe procedure in the daily practice of dental surgeons for mandibular anaesthesia. Unfortunately complication do occur, which might be systemic, local and distant. Ocular complications are rare and underisable. Diplopia-double vision occurred following inferior alveolar nerve block in the ipsilateral side which was transient, is being presented here.

Aims & Objectives

The purpose of presenting this poster is to enlighten possible mechanism to explain the pathogenesis of diplopia followed by inferior alveolar nerve block which is rare.

Method

A patient with the chief complaint of pain in left lower back tooth region reported to department of oral & maxillofacial surgery. Examination & investigation revealed mesioangular impacted 38. Surgical removal of impacted tooth was planned under la with adrenaline, as the patient was not medically compromised. Routine inferior alveolar nerve block was given after test dose. After uneventful removal of impacted tooth, patient complained of ipsilateral double vision, which was found to be diplopia due to iatrogenic paresis of sixth cranial nerve.

Results

Patient was kept under observation. Diplopia occurred transiently and was self limiting. It resolved after local anaesthesia effect got weaned away.

Conclusion

The surgeons should be aware of such rare complication and should be familiar with their management.

Reference

1. (2015) Diplopia after inferior alveolar nerve block: case report and related physiology. *J Dent Anesth Pain Med* 15(2):93–96

Abstract No: 1109**Nerve Injury**

Dr. Georgie P Zachariah

PMS College of Dental Science and Research

Abstract

Nerve injury associated with dentoalveolar surgery is a complication contributing to altered sensation of the lower lip, chin, buccal gingivae and tongue. Since the recovery from nerve injury is unpredictable, the morbid outcome of surgery related to nerve injury must be avoided at all costs. Injury to the branches of the trigeminal nerve is one among the possible complications associated with surgical procedures in the orofacial region. Nerve injuries can be painful and can affect the patient's quality of life apart from the Hippocratic concept of "primum nil nocera". Inferior alveolar nerve/lingual/long buccal nerve injury can be a subject of patient complaints, litigation and malpractice suits. Excluding major surgery, the most common cause of ian/lingual nerve injury is 3rd molar surgery, owing to the close anatomical proximity of these structures. Magnitude of nerve injury ranges from nerve compression to complete nerve transection. Radiological markers demonstrate the proximity of the inferior alveolar canal and the 3rd molar (2). Intra operative ian injuries are closed nerve lesions & severity of the nerve injury can be assessed by comparison with the contralateral side. Symptoms of neurologic nerve injury ranges from allodynia, paresthesia, dysesthesia and complete anesthesia. Most patients recover to a level where micro neurosurgical repair is of questionable relevance. Surgical intervention for a damaged ian is not usually indicated, but may be undertaken if the nerve is completely divided and severed ends are misaligned.

Abstract No: 1126**Double trouble – a case report and review of literature**

Dr. Dhanusha Chandran R, Dr. Diana Daniel, Dr. Harish Kumar A

The Oxford Dental College and Hospital

Abstract**Background**

Local anaesthetic (LA) solutions are routinely used for oral and maxillofacial procedures all over the world. Despite its commonness the complication associated with these can perplex even the most experienced clinician at times. Ophthalmic complications following a nerve block is practically unheard of. These complications are often related to the technique rather than the anaesthetic material itself.

Aims

The aim of this presentation is to report a rare case of diplopia following posterior superior alveolar nerve (PSAN) block and to discuss the cause of occurrence of diplopia following psan block.

Method 43 year old female outpatient reported for extraction of upper left maxillary second molar. Adequate anaesthesia was achieved by

psan block and greater palatine nerve block and tooth extraction was done. Patient developed diplopia within 5 min after the extraction. Despite following proper tissue preparation and appropriate anaesthetic techniques local and systemic complications associated with la occasionally occur. Though the la use is very common in dentistry only a few neuro-ophthalmological complications has been reported. Diplopia secondary to dental local anaesthetic solution is rare in dental literature. Fortunately, most complications reported in English literature, in the eye have been transient.

Conclusions

Diagnosis of transient diplopia was made based on the events leading to the clinical symptoms. Ocular complications following dental anaesthesia may occur. In these cases, a multidisciplinary approach towards understanding these undesired pathologies should be encouraged.

Category – Head and Neck

Abstract No: 0273

Neck dissection for oral cancer: an operation in evolution

Dr. Yamir Budhwar, Dr. Amit Dhawan, Dr. Ramandeep Singh Bhullar, Dr. Tejinder Kaur

Sri Guru Ram Das Institute of Dental Sciences & Research, Amritsar

Abstract

In 1906, George W. Crile was the first person to describe radical neck dissection, which encompasses the surgical removal of neck metastasis contained between the superficial and deep fascial layers of the neck. The main goal of this procedure was to remove, en bloc, the entire ipsilateral lymphatic structures from the mandible superiorly to the clavicle inferiorly and from the infrahyoid muscles to the anterior border of the trapezius. The presence of lymph node metastasis in the neck is accepted as the single most important adverse independent prognostic factor and an indicator of survival in carcinoma of the head and neck. Neck dissection in its various forms is the standard surgical treatment for clinical, subclinical and subpathologic metastatic cancer to the neck. In the last few decades, progressive advances have occurred in the understanding of cervical fascial planes, lymphatic drainage patterns, preoperative staging and extracapsular spread. A concern to maximize control and to minimize morbidity has prompted modifications to the classic neck dissection. The aim of this poster is to enumerate various neck dissection procedures, when to do neck dissection in n0 & n + neck along with our institutional data and cases.

References

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Abstract No: 0381

Types of Neck Dissection

Dr. Dhanashri Jadhav, Dr. Gaurav Singh, Dr. Madan Mishra

Sardar Patel Post Graduate Institute of Dental and Medical Sciences, Lucknow, UP

Abstract

Background

Cancers in the head and neck region commonly metastasize to cervical lymph nodes. The single most prognostic factor in head and neck cancer patients is the status of cervical lymph nodes. The first conceptual approach for removing neck nodal metastasis was made by Kocher in 1880. The classic technique of radical neck dissection was later described by George Crile in 1906.

Keywords Neck dissection, head and neck cancer.

Objective

To analyse and trace the evolution of neck dissection and discuss the various classifications of neck dissections performed in patients with head and neck cancer.

Methods

The present study discusses evolution of neck dissection, patterns of neck metastasis, clinical staging of lymph nodes, radiographic evaluation, classification and types of neck dissection.

Result

Lymph node dissection can be categorized as comprehensive, selective and extended. Radical neck dissection (rMD) is standard basic procedure for cervical lymph node dissection. Modified radical neck dissection (MRND) is planned when there is gross nodal metastasis to the neck that does not directly infiltrate to the non-lymphatic structures. The supraomohyoid neck dissection is the most commonly performed selective neck dissection for treatment of n0 neck. Rnd is performed in patients with extensive cervical lymph node metastasis. Extended neck dissection are usually performed when mrnd or rnd is planned for n + neck.

Conclusion

The term rnd is used for any neck dissection in which four or more lymph node levels are removed and mrnd involves excision of same lymph nodes as performed in rnd with preservation of one or more non-lymphatic structure. Treatment of neck in patients with head and neck malignancies are challenging and certainly fraught with controversy. The current classification of neck dissections has met world wide acceptance, however it is not perfect for every situation.

Abstract No: 0391

Pleomorphic Adenoma

Dr. Lokesh Kumar Pandey

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Abstract

Introduction

Pleomorphic adenoma (PA) is the most common benign neoplasm of the salivary glands. The parotid gland is affected in more than 70% of cases, submandibular gland (SMG) in 5–10%, sublingual gland in 1%

and the minor glands in 5%-15%. Malignant transformation occurs in 5–25% untreated patients. These tumors are generally benign tumors but can turn malignant. Hence, treatment is essentially surgical excision.

Aims/Objective

To describe a pa case associated with submandibular gland.

Method

A 20 years old female presented with right side upper neck swelling for the past 4 months, painless, progressive and without any pressure symptoms like change in voice or difficulty in breathing. A 5 × 3 cm, swelling was seen in the right submandibular region. The swelling was firm, non-tender, non-pulsatile. a provisional diagnosis of pa of right smg was made and excision of the gland was done under general anaesthesia. Skin incision was given 2 cm below right side mandible. Superior and inferior skin and subplatysmal flaps were raised. Marginal mandibular nerve was identified and preserved. Gland was excised in totality with precise dissection. Post op period was uneventful. The specimen was sent for histopathological examination (hpe).

Result/Finding- hpe reported a well encapsulated biphasic tumor of lobules were composed of few acinar structures lined by outer myoepithelial cells and inner columnar cells in a myxoid background. The final diagnosis of pa of right smg was made.

Conclusion

Based on the explanation and the literature that has been reviewed, surgical excision is advocated as treatment of choice because of chances of malignant transformation in future.

Reference

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Abstract No: 0427

Oncolytic virus therapy in head and neck cancer: a future direction

Dr. Vani N R

Bapuji Dental College and Hospital, Davngere

Abstract

Cancer is a major cause of death worldwide, in that head and neck cancer accounts for 5% of all malignancies. There has been tremendous improvement in management of head and neck cancer including surgery, advanced chemotherapy, radiotherapy, immunotherapy and gene therapy. All treatment modalities currently employed are associated with potential adverse effects. Hence, there is an urgent need of treatment modality that target cancer cell and has minimal side effects. Oncolytic viral therapy recently been recognized as promising new therapeutic approach for head and neck cancer patients. They are the next major breakthrough in cancer treatment following the success in immunotherapy using immune check point inhibitors. It is naturally occurring viruses that selectively replicate and kill cancer cells without harming normal tissues. They destroy malignant cells by direct cancer cell lysis secondary to viral replication. It causes direct cytotoxicity by producing protein that is lytic to tumour cell. Immunosuppression with chemotherapy or monoclonal antibodies has been used in trials with safe side effect profiles and enhancement of oncolytic virus response. By arming oncolytic viruses with functional transgene, whole panel of oncolytic viruses

with variety of anti-tumour functions would be available in future, from which combination of appropriate viruses can be chosen according to type and stage of cancer. A new era of treatment seems at dawn, where cancer patients can freely choose oncolytic virus therapy as treatment option.

Abstract No: 0460

Malignant transformation of oral submucous fibrosis - an incidental finding

Dr. Deepa D S

PMS College of Dental Science and Research

Abstract

Oral submucous fibrosis (osmf) is a debilitating condition of oral cavity which has significant potential for malignant transformation. Oral submucous fibrosis, first described in the early 1950 which causes progressive limitation of mouth opening and intolerance to hot and spicy food. The possible aetiological factors to date are areca nut, capsaicin in chillies, micronutrient deficiencies of iron, zinc and essential vitamins. Many treatment protocols for oral submucous fibrosis have been proposed to alleviate the signs and symptoms of this disorder among which the first and foremost thing is to completely quit the habit of betel nut chewing. The current protocol for managing the condition can be divided into two broad groups: conservative treatment and surgery. Conservative management is recommended for mild to moderate stages of oral submucous fibrosis with inter-incisal mouth opening of greater than 25 mm, while surgery is considered in later stages, especially when patients have severe trismus. various surgical procedures are available for treating oral submucous fibrosis, but all of them have their inherent drawbacks. The treatment modalities depend on the stage & severity of the disease. Malignant transformation of oral submucous fibrosis to squamous cell carcinoma has been estimated to be between 2% and 8%. Here i present a poster on oral submucous fibrosis with malignant transformation.

Abstract No: 0473

Diagnostic Dilemma

Dr. Dhivya R

Rajah Muthiah Dental College and Hospital

Abstract

Reactive fibrous hyperplasia, also known as irritation or traumatic fibroma is a reactive, inflammatory hyperplastic lesion of the connective tissue. Because the oral mucosa is constantly under the influence of various internal and external stimuli or it exhibits a range of developmental disorders, irritation, inflammatory or neoplastic conditions. Reactive lesions are tumor like hyperplasia which show a response to a low-grade irritation or injury such as chewing, food impaction, calculus, iatrogenic like over-hanging restoration and over extended dentures. They are commonly seen in gingiva and other areas such as tongue, palate, cheek and floor of mouth is less common. The clinical appearance of this lesion is similar to neoplastic

lesion. This is a challenge in the process of diagnosis. Earlier detection and treatment of reactive lesion by dentists can reduce further complications. The awareness of the frequency and description of the such lesion can help a clinician to make a better diagnosis and offer optimal treatment. This presentation includes a case report of reactive fibrous hyperplasia which turned out to be a well differentiated squamous cell carcinoma in the post operative histopathological report. It also includes various review articles for the diagnosis and treatment plan and better knowledge about the same.

Abstract No: 0517
Acetic acid for treatment of pseudomonas infection

Dr. Aditi Subrata Saha

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Abstract

Background

The use of various acids, such as acetic acid, boric acid, ascorbic acid, alginate acid, and hyaluronic acid has been reported for the treatment of skin and soft tissue infections, and burn wound infections. The concept of using topical antiseptics on open wounds is to prevent and treat infections and shorten the time taken to heal the wounds. The use of topical agents on wounds to prevent infection is a minimal ability to develop resistance to the microorganisms. *Pseudomonas aeruginosa* is a gram-negative opportunistic pathogen with innate resistance to many antibiotics. Topically applied dilute acetic acid, which is cheap and easily available, has been found to be effective in such chronic wounds.

Aim

To evaluate the efficacy of acetic acid for treatment of pseudomonas infection.

Objective

To evaluate the efficacy of acetic acid for treatment of pseudomonas infection in operated cases of oral squamous cell carcinoma.

Materials and Methods

Over the period of 2 years, 25 patients were treated for oral squamous cell carcinoma. During the post-operative phase, 4 of these patients developed nosocomial infection; *Paeruginosa* being the causative organism and acetic acid was used for the treatment.

Results

All 4 patients showed improvement after the local application of acetic acid and healthy healing of the wound.

Conclusion

The use of acetic acid is therefore recommended for effective elimination of multiple antibiotic resistant strains of *p. Aeruginosa* from infection site.

Abstract No: 0535
Recent advances in the cancer therapy

Dr. Kalpana Jagalanki

Government Dental College, Vijayawada

Abstract

“Necessity is the mother of all inventions” this is also true in case of cancer therapy. Though malignant diseases are being treated by

various therapeutic modalities, the greatest drawbacks are recurrence and distant metastases. Few of the treatment methods are also associated with serious side effects, disfigurement and disability. To overcome these setbacks, new treatment methods such as photo dynamic therapy, intralesional chemotherapy, intraarterial chemotherapy, intensity modulated radiation therapy, immunotherapy, gene therapy, cancer vaccines have been proposed, few of them seem to be very promising. This scientific e - poster is an overview of the recent advances in cancer therapy.

Abstract No: 0550
Karapandzic Flap: A Useful Option for Reconstruction of Lip Carcinoma

Dr. Pallavi Rathi

Bharati Dental College Pune

Abstract

Background

Carcinoma of lip is a common malignancy of head and neck region. 90% to 95% of them affect the lower lip and squamous cell carcinoma is the most frequent type. Here we present a case in which reconstruction of the carcinoma of the lower lip with defect more than 2/3rd of lip was successfully operated using karapandzic flap.

Aims

To get rid of disease. Restoration of form,function and aesthetics of lip using karapandzic flap.

Methods

Reconstruction of lower lip using karapandzic flap. Results: satisfactory functional and cosmetic results were obtained. With minimal scar formation and microstomia.

Conclusion

Various techniques are proposed for reconstruction of peri-oral defects, Karapandzic is one of them. Karapandzic flap seems to be first choice for reconstruction of large midline defect of lip since it restores function and aesthetics along with sensate and mobile competent lip.

Abstract No: 0591
The forehead flap as a salvage flap for radial forearm free flap in defects of the buccal mucosa

Dr. Divya

Saveetha Dental College

Abstract

Background

Head and neck cancer is primarily a mucosal disease of upper aero digestive tract. Optimal reconstruction following ablative head and neck surgery is primary goal in improving quality of life and function.

Case report

A 52 year old female patient reported to our oncology department complaining of pain in left cheek region for past 5 months. Intra oral clinical examination revealed an ulcero-infiltrative growth on the left buccal mucosa extending from left commissure of the mouth anteriorly and distal of 26 posteriorly. Incisional biopsy was obtained from

left buccal mucosa of which the histopathological report was suggestive of squamous cell carcinoma of left buccal mucosa. clinical tumor staging cT3N0M0. Under general anaesthesia, wide local excision of the lesion with adequate margins along with marginal mandibulectomy done on left side. Snd levels 1–4 are removed. the buccal defect reconstruction was done with radial forearm free flap harvested from left arm. Microvascular anastomosis done with facial artery and vein. Re-exploration was carried out on post operative day 1 as congestion was noted in the region of anastomosis evident from a pencil doppler. A thrombus was removed and reconstruction was done with a rotation-forehead flap. Failure of this flap is a problem for the reconstructive surgeon as it is difficult to get tissue of this consistency. Although the forehead flap is rarely used as a primary flap for oral cavity reconstruction as the donor site morbidity is quite unacceptable in forehead flaps, it can be considered as a work horse flap in certain situations in oral cavity reconstruction due to its ease of harvest, reliability and supple consistency. This experience of patient proves that the forehead can be used effectively as a salvage flap in radial forearm failure situations with reasonably good function albeit poor esthetics in the donor site.

Abstract No: 0626
Oral carcinoma cuniculatum - a rare entity of squamous cell carcinoma

Dr. Divya P, Dr. Sanjiv Nair

Bangalore Institute of Dental Sciences

Abstract Background

Carcinoma cuniculatum is a rare low-grade variant of squamous cell carcinoma, which shows features of verrucous carcinoma and squamous cell carcinoma. It is well differentiated and was first described by Arid et al. Originally known as epithelioma cuniculatum, it was believed to be restricted to cutaneous tissue usually occurring in the lower extremity (plantar surface of foot). Now, it has been reported in non-cutaneous anatomic sites like oesophagus, oral cavity, larynx, pharynx etc. Aim: this poster is made with the view of throwing light on the rare occurrence of oral carcinoma cuniculatum by reporting 2 cases operated in our unit with literature review.

Literature review

Well documented literature is present on the preoperative misdiagnosis, multiple antibiotic therapy post surgically. As per literature till date, mandibular gingiva is the most affected site. The clinico-radiopathological profiles of patients diagnosed with oral carcinoma cuniculatum is depicted. Most common presentation is sessile white to pink slight papillary surface and hallmark of bony invasion, which is exemplified in the reported cases. Total resection is always the accepted primary treatment modality because of high success rate. Data available on other treatment modalities like radiotherapy and chemotherapy is very less and controversial and it has not added any benefit to the prognosis.

Conclusion

Oral carcinoma cuniculatum has no definitive statements about etiology, pathology of the disease, recurrence rate and metastasis. As the tumor is predominantly limited to local infiltration and has local aggressiveness, surgical resection with free margins is treatment of choice and its carriers has excellent prognosis with local tumor control.

Abstract No: 0688

Osteosarcoma of lower jaw successfully treated with resection and adjuvant chemotherapy: a case report

R. Pynkmenlang War, Prof. Muthusekhar

Saveetha Dental College and Hospital

Abstract Background

Osteosarcoma is a primary malignant bone neoplasm characterised by osteoid synthesis by malignant osteoblast. Evidence of direct osteoid formation by neoplastic cells is considered to be an essential criterion for its diagnosis. Swelling of the jaw with associated pain and tooth mobility is the common clinical manifestation, it presents radiographically as an osteolytic, osteoblastic, or mixed lesion. Also, symmetric widening of the periodontal ligament space of the involved teeth. This report described a case of osteosarcoma of the right body of mandible which clinically presented as soft tissue growth from the gingiva, mimicking a common benign reactive lesion such as giant cell granuloma.

Case presentation

A 30 years old female reported with a chief complaint of a painless swelling in the right lower back tooth region for past 20 days the patient underwent extraction of 46, 1 week prior before she noticed the swelling. Radiographic findings shows evidence of sun burst appearance in Radiovisiography (RVG) and Magnetic resonance imaging (MRI), Computed tomography (CT) scan show a radiolucent area with internal ground glass calcification. Positron emission tomography/Computed tomography (PETCT) shows no metastasis. on confirmation through biopsy the tumour was resected and reconstructed with recon plate and the patient was advised for chemotherapy.

Conclusion

Because of the high rate of distal metastases, surgery combined with chemotherapy is currently recommended as an essential treatment for extragnathic osteosarcoma. Local control has been suggested to be the principal prognostic factor for head and neck osteosarcoma; therefore, the achievement of wide surgical excision should be the primary goal, even during neoadjuvant chemotherapy the safe recommended margin in osteosarcoma of the extremities is 3 cm. However, this margin may still be insufficient, and probably increases the risk of local recurrence. Therefore, 2-cm bony margins and at least 5-mm soft tissue margins have been recommended, assuming that reconstructive surgery is possible.

Abstract No: 0740

Chemoradiation therapy induced hyperglycemia: a deadly manifestation

Dr. Parvathy Reghunadhan

BAPUJI DENTAL COLLEGE AND HOSPITAL, DAVANAGERE

Abstract

Cisplatin (cddp) is frequently the chosen chemotherapy agent during treatment of head and neck cancer because of demonstrated benefit on local control and survival. But cddp impairs glucose tolerance through hyperglucagonemia and deficient insulin response

leads to hyperglycemia. The appearance of diabetes mellitus in connection with cddp chemotherapy has been the subject of relatively few studies. The literature available contains only sporadic descriptions of cases of hyperosmolar coma related to cisplatin chemotherapy. The cddp dose used against head and neck cancers was high (100 mg/m² per cycle, giving a cumulative dose of 400 mg/m²), which may explain the appearance and frequency of hyperglycemia and hyperosmolar coma. Hyperosmolar non-ketotic coma is a syndrome characterized by severe hyperglycemia, hyperosmolarity and dehydration in the absence of ketoacidosis and is associated with a high mortality rate (20% to 70%). Cisplatin treatment produces an increase in inducible nitric oxidesynthase and somatostatin in the pancreatic islets. Somatostatin and nitric oxide suppress the secretion of insulin and nitric oxide is regarded as one of the main mediators inducing insulin-dependent diabetes. Because hyperosmolar non-ketotic coma may be life threatening, early diagnosis and treatment of this disorder is important during cisplatin chemotherapy for malignant disease and close monitoring of glucose levels along with treatment with cisplatin is necessary. Hence this poster highlights the fact that alteration in glucose metabolism is an unrecognized complication during chemoradiation for head and neck cancer which may lead to de novo diabetes mellitus in non-diabetic individuals.

Abstract No: 0772

Non hodgkins lymphoma:perplexing materialization in oral cavity

Dr. Krishna Madhuri Hari

Bapuji Dental College and Hospital, Davangere

Abstract

Lymphomas are solid, malignant tumors having a wide spectrum of clinical and pathological features. Non-hodgkins lymphoma is a subtype of lymphomas with two-thirds of the cases presenting as lymph node enlargement and only one-third reported in the extra-nodal sites. The incidence of oral non-hodgkins lymphoma is about 0.1–5%. Non-hodgkins lymphoma detected primarily in the bone are quite rare. But among jaw lesions they are more frequently reported in the maxilla than mandible. There are no classical characteristic clinical features of lymphomas involving the jaw bones. They usually mimic a periapical pathology or benign condition. So it is often clinically diagnosed as a dental infection. Radiographically these lesions resemble osteomyelitis or other malignancies creating a diagnostic dilemma.owing to the scarcity of reported cases of oral lymphomas-the interpretation of the biological behaviour and treatment options involving this disease entity becomes difficult. The purpose of this poster is to emphasize the importance of early diagnosis to ensure appropriate treatment, to improve prognosis and quality of life. Hereby we present a case of an 83 year old female patient diagnosed with non-hodgkins lymphoma of the left maxilla.

References

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Abstract No: 0774

Craniofacial Access Osteotomies

Dr. Vinay Singh Parihar

Army Dental Centre (R&R)

Abstract

Background- a plethora of pathologies occur in skull base and deep spaces of head and neck. Surgical management of these pathologies poses a great challenge owing to the anatomical complexities and proximity to vital structures. A multidisciplinary approach is often required. Various approaches have been devised to provide surgical access by transmaxillary, transzygomatic and transmandibular approach.

Objectives- to review the surgical access, outcome and complications of various craniofacial osteotomies in patients referred from dept of neurosurgery, oncology and ent head and neck surgery for access osteotomies.

Methods- access to all types of pathologies was provided by transfacial approach. Deep intra-orbital tumours were accessed with transzygomatic lateral or inferior orbitotomy approach. Pathologies at skull base like atlanto axial dislocation with basilar invagination, access to C1, C2 and clivus was achieved through transmandibular approach. Tonsillar, lateral pharyngeal and posterior tongue tumours were accessed with transmandibular approach. Nasopharyngeal tumours were accessed with transmaxillary approach. Separated modules were fixed back with titanium miniplates and screws.

Results- no occlusal discrepancy, permanent neurological deficit or any long-term complications were encountered. One of transmandibular approach patient suffered gingival recession followed by mobility of 31. One of lateral orbitotomy approach suffered temporary neuropraxia of temporal branch of facial nerve. Transmaxillary and inferior orbitotomy approach suffered temporary infraorbital nerve paraesthesia.

Conclusion- the access surgery should have minimal morbidity and minimal additional operating time. Patient specific osteotomy approach needs to be carried out based on the site, size, type of tumour, adjacent anatomical structures and anticipated complications.

References

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Abstract No: 0839

Demographic profile of oral tumors: study on 209 patients

Dr. Suhani Ghai

Peoples Dental Academy

Abstract

Background

India is endemic to oral malignancy due to high addiction of tobacco and betel nut. In addition to malignant tumors, benign tumors (like fibromas and odontogenic tumors) are also very common in India. No

studies have been conducted till now to compare the demographic profile of benign and malignant tumors.

Methods

In this retrospective study, biopsy records from 2006 to 2018 of solid tumors presenting to omfs department were analyzed. The age and gender distribution of benign and malignant tumors were compared using standard statistical methods.

Results

Of 394 biopsy records analyzed, 107 were dysplasias/hyperplasias and 113 were cystic lesions, so were excluded; while remaining 174 were neoplasms and hence were included in the study. Of these, 77(37%) were malignant while 132(63%) were benign tumors. Among the benign tumors, fibromas(35/132, 26%) and odontogenic tumors(33/132, 25%) were the most common; and among the malignant tumors squamous cell carcinoma was the most common (64/77, 83%). Compared to benign tumors, mean age of patients with malignant tumors was significantly higher (51 ± 14 versus 32 ± 16 years).

Abstract No: 0940

Chyle leak- an evil to conquer

Dr. Surabhi Sanjaymagoo

Dr. D. Y. Patil Dental Hospital

Abstract

What is chyle leak-chyle is a milky bodily fluid consisting of lymph and emulsified fats, or free fatty acids. It is formed in the small intestine during digestion of fatty foods, and taken up by lymph vessels specifically known as lacteals. Lymphatic injury leading to leakage of chyle is a potential complication that may arise after neck surgeries. Although the incidence of chyle leak post surgery is low this complication can present significant challenges. There is no consensus on its management. The aim of this poster is to propose different management strategy for postoperative chyle leak management. Diagnosis-clinical drain output biochemical assay-sudden increase in drain output supraclavicular erythema, lymphedema, or palpable fluid collection creamy or milky drain output in drains treatment-restricted activity and diet;negative wound pressure therapy;somatostatin and octreotide-somatostatin and its newer derivative octreotide is gaining popularity as it reduces digestive secretions;topical agents-sclerosing agents such as ok-432, tetracycline, cyanoacrylate adhesives, fibrin glue, polyglactin mesh;surgical treatment- the leaking thoracic duct can be ligated, covered with a muscle flap conclusion: chyle extravasation can result in delayed wound healing, dehydration, malnutrition, electrolyte disturbances, and immunosuppression. Prompt identification and treatment of a chyle leak are essential for optimal surgical outcomes.

Abstract No: 0944

Severity of Snuff Dipper's Cancer (Verrucous Carcinoma) – A Case Report

Dr. K C Aswani

Sri Rajiv Gandhi Dental College

Abstract

Background

Oral verrucous carcinoma is a rare locally invasive growth. It is also called as Ackermann's tumour. This clinicopathologic entity exhibiting low grade squamous cell carcinoma and having a striking association with the habit of chewing tobacco or using snuff and with a better prognosis than a squamous cell carcinoma. Verrucous carcinoma, a well-established warty variant of squamous cell carcinoma. The verrucous carcinoma presents as exophytic cauliflower like growth. The verrucous carcinoma(VC) does not metastasize as the basement membrane is intact. It is characterized by acanthosis. The behavior of the tumour is not very aggressive and usually wide local excision without addressing the neck is adequate. However, although the tumour is labelled as verrucous carcinoma histopathologically, a transitional change to invasive squamous cell carcinoma may be present in some parts of a large lesion, which will be often missed if the biopsied tissue does not include the part of lesion. In 1980, shear et al. First differentiated verrucous hyperplasia and VC based on the absence of endophytic growth in the former entity, wherein the verrucous and hyperplastic epithelium was completely superficial to the adjacent normal epithelium. Therefore, it is crucial that biopsies of verrucous lesions include a lesional margin with adequate depth.

Case report

A case of verrucous carcinoma involving right buccal mucosa in a 42-year-old female patient which was diagnosed in our institution. The lesion was measuring around 3*6 cm extending from 1 cm lateral to corner of mouth to retro molar area anteroposterior from maxillary occlusal plane to lower labial vestibule. This poster depicts the case of verrucous carcinoma treated surgically and reconstruction done by using buccal fat pad posteriorly and collagen membrane anteriorly.

Abstract No: 0945

Detecting Oral Cancer

Dr. Richa Bahadur

Buddha Institute of Dental Sciences and Hospital

Abstract

Background

Oral squamous cell carcinoma (OSCC) is the sixth common cancer worldwide, accounting for approximately 4% of all cancers. Despite improvements in the management of diagnosed cases of oral sec, delays in diagnosis undoubtedly increase morbidity and mortality. Sec of the oral cavity may comprise up to 50% of all cancers in developing and underdeveloped countries, and its prognosis is poor. Therefore, an improvement in the prevention and control of oral cancer is of critical importance. Aim early diagnosis of oral carcinoma -greatly increases the probability of cure with minimum impairment and deformity.

Method

Oral test with toluidine blue may be used as an adjunct to soft tissue examination to highlight any invisible, asymptomatic lesions. Exfoliative cytology can detect early oral cancer. The oral CDX brush biopsy technique has been proposed as a highly accurate method of detecting oral precancerous and cancerous lesions.

Conclusion

As discussed, the survival rate for patients with oral scc is showing no sign of improvement. Hence, until more effective treatment modalities are available, emphasis should be placed on primary prevention (reducing exposure to carcinogens in the form of tobacco and alcohol) and secondary prevention (early detection and treatment). Clinicians should remain alert to signs and symptoms of oral cancer and premalignancy in persons who regularly use tobacco or alcohol.

Abstract No: 0965**Utility of USG in accessing lymph nodes in oral carcinoma**

Dr. Rubeena Tamsang

Guru Nanak Institute of Dental Sciences and Research

Abstract

Lymph nodes are a small cluster of cells, surrounded by capsules and distributed throughout the body. Ducts go in and out of them. They bring the lymph fluid from the chyle and some red blood cell back into circulation through the veins. The cells in lymph nodes are lymphocytes which produce antibodies and macrophages which digest the debris. Thus helping to fight infections. The lymph nodes are enlarged in various disease entities. Identifying the relevant lymph nodes is important in treating the patients. Oral cancer is the sixth most common malignancy of all malignant tumours; the majority are oral squamous cell carcinoma. Cervical lymph nodes metastasis plays an important role in management of oral cancer. Therefore there is a necessity of an appropriate investigative procedure which can differentiate between positive and negative nodes to aid in staging and grading of oral cancer. Colour doppler usg for neck assessment is one of the established ways in the field of evaluation of neck metastasis in oral squamous cell carcinoma. Firstly the cervical lymph node evaluation can be done due to good accessibility of the cervical region, high spatial resolution and soft tissue discrimination. The development of the new ultrasound techniques increased the utility of this imaging method for superficial lymphadenopathy, neck metastasis and occult metastasis.usg also plays crucial role in planning the treatment. To withstand the clinical exams, gray scale usg, doppler usg, lymphoscinty, this poster deals with utility of usg in accessing lymph nodes.

Abstract No: 1040**A diagnostic dilemma**

Dr. Jedidiah Fredrick Abisheg

Sri Ramachandra University

Abstract

Swelling in the maxillofacial region is one of the most common presenting complaint in most patients. As much as it is common, it can also be misleading on a diagnostic basis due to its wide spectrum

of diversity. Hence proper examination and adequate investigations must be carried out before arriving at a specific diagnosis. We hereby present a poster portraying one such case we encountered where proper and adequate investigation made us change the course of the treatment.

Abstract No: 1042**Marginal V/S segmental mandibulectomy: treatment modality selection for oral cancer: current concepts and controversies**

Dr. Abhivyakti Tewari, Dr Gaurav singh, Dr Madan Mishra, Dr Amit Gaur

Sardar Patel Dental College

Abstract**Introduction**

Segmental resection has traditionally been the treatment of choice for oral squamous cell carcinoma (OSCC) adjacent to or invading the mandible. Since marchetta et al. Confirmed that tumor invades the mandible by direct extension rather than through periosteal lymphatics, more conservative procedures have been devised to avoid the cosmetic and functional problems arising from segmental mandibular resection. There is general agreement that local recurrence is usually in the soft tissue and not in the bone after marginal resection and large tumor size and cortical bone involvement are not contraindications to marginal mandibulectomy or rim mandibulectomy.

Objectives

Evaluation of the current concepts and controversies in regard to oscc so as to provide with current guidelines to approach a tumour potentially involving the mandible in an attempt to clear the dilemma between marginal and segmental mandibulectomy.

Methods

A review of existing literature has been carried out to come to a definitive line of treatment for oscc keeping in mind the multifactorial etiology, current concepts and controversies.

Result

Based on our review and experience, whenever there is nil or superficial cortical mandibular invasion, marginal mandibulectomy is the modality of choice whereas segmental mandibulectomy is undertaken when extensive mandibular cortical or medullary invasion has occurred.

Conclusion

Tumours that approach or involve the mandible require specific understanding of the mechanism of bone involvement and it's application while undertaking segmental mandibulectomy or employing any of the mandible sparing approaches such as marginal mandibulectomy/mandibulotomy.

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Abstract No: 1053
Oral Malignant Melanoma

Dr. Sandeep Sagar Panda

SCB Dental College & Hospital Cuttack

Abstract

The oral mucosa is primarily involved in fewer than 1% of melanomas, and the most common locations are the palate and maxillary gingiva. Metastatic melanoma most frequently affects the mandible, tongue, and buccal mucosa. In contrast to the incidence of cutaneous melanoma, the incidence of oral melanoma has remained stable for more than 25 years. The clinical presentation of malignant melanoma, its asymptomatic condition, rarity of the lesion, poor prognosis and the necessity of a highly specialized treatment are factors that should be seriously considered by the involved health care provider.

Case history

A 51-year-old male patient reported with the chief complaint of a painless, pigmented growth in the right anterior maxillary gingiva since 8 months, which started as a pin point lesion, progressed gradually, and extended to the palatal gingival margin. She gave no history of any systemic illness or trauma to the head and neck region. General physical examination was insignificant and her vital signs were under normal limits. On intraoral clinical examination, a non-tender pigmented growth was present on the right maxillary attached gingiva in relation to central and lateral incisors of about 1–3 cm in size approximately. The growth was sessile with rough surface and the color of overlying mucosa of the growth was black with irregular periphery extending to the marginal gingiva of the adjacent tooth, the growth was extending to the palatal gingiva involving the rugae of hard palate.

Abstract No: 1070
Liquid Biopsy

Dr. Jabir. K

MES Dental College, Perinthalmanna

Abstract

Liquid biopsy are non invasive blood tests that detect circulating tumor cells and fragments of tumor dna, that are shed into the blood from primary tumor amd metastatic sites. Samples collected from serum, blood, plasma, urine, saliva, csf. Advantages: 1. Early detection and treatment. 2. Tracking of tumors 3. Study mutation and molecular changes over a period of time. 4. Validate efficacy of treatment 5. Detect relapses.

Abstract No: 1104
Teardrop defects of the alveolar bone associated with gingival neurofibroma

Dr. Seiko Kubota, Tomoaki Imai, Soichi Iwai, Mitsuhiro Nakazawa, Narikazu Uzawa

Department of Oral and Maxillofacial Surgery, Osaka University Graduate School of Dentistry

Abstract

Background

Among the diverse pathological conditions associated with neurofibromatosis type 1 (NF-1), minor manifestations in the oral and maxillofacial region are occasionally overlooked. Herein, we present an unusual case of gingival neurofibroma in a patient with NF-1 associated with characteristic osseous defects in the upper alveolus.

Case presentation

A 5-year-old boy with NF-1 was referred for the evaluation of gingival enlargement in the posterior left maxilla. An incisal biopsy led to the diagnosis of neurofibroma. At 22 years of age, the patient was referred again with a complaint of bleeding and pain in the same region refractory to periodontal therapy. The gingiva and tuberosity were swollen, and tooth 27 was affected by the tumor. Radiography revealed a low level of the interdental septum beneath the tumor with a relatively intact periodontal cortical bone, exhibiting a teardrop-shaped bone defect. The lesion was completely resected with the periosteum.

Conclusion

Gingival neurofibroma in NF-1 may be associated with osseous and dental abnormalities and can be mistaken for periodontitis. Oral health care providers should raise awareness of this clinical entity and manage esthetic and functional problems of the oral and maxillofacial region by carefully monitoring for malignant transformation of neurofibroma in NF-1.

Abstract No: 1123
Versatility of Pectoralis Major Myocutaneous Flap

Dr. Nilanshu Singh, Dr. Gaurav Singh, Dr. Madan Mishra, Dr. Amit Gaur

Sardar Patel Post Graduate Institute of Dental and Medical Sciences, Lucknow

Abstract

Background

The pectoralis major myocutaneous (PMMC) flap has been used as a versatile and reliable flap since its first description by Ariyan in 1979. In India head and neck cancer patients usually present in the advanced stage making pmmc flap a viable option for reconstruction. Although free flap using microvascular technique is the standard of care, its use

is limited by the availability of expertise and resources in developing world.

Keywords Pectoralis major myocutaneous flap, maxillofacial defects. **Aim**

To discuss the reliability of various pmmc flap designs for reconstruction of oral & maxillofacial defects.

Material and method

A review of existing literature has been carried out with a total of 10 pmmc flap reconstruction performed at our centre at sardar patel post graduate institute of dental and medical sciences, lucknow.

Result

Based on our review and experience, of the total 10 patients 3 female and 7 male patients were operated and pmmc was used to reconstruct the oral mucosal defects in 3 patients, oral mucosa along with outer skin defect in 5 patients, floor of mouth or tongue defects in 2 patients. In all cases chest was closed primarily. The overall flap survival rate was 100%. Only minor complications were noted in 3 patients where dehiscence was noted at palate & was managed successfully.

Conclusion

Now, of the current emphasis of reconstruction has been shifted to microvascular free tissue transfer. However, the pectoralis major myocutaneous flap still continues to be the workhorse in head and neck reconstruction, as it is economical and has a reliable vascular supply.

Reference

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Abstract No: 1168

Evaluation of surgical margin in oral cancer

Dr. Akshatha K

A B Shetty Memorial Institute of Dental Sciences

Abstract

“Cancer is a major cause of fear, morbidity & mortality all over the world. Globally, oral cancer is the sixth most common cause of cancer related deaths. The central tenet of surgical resection in oral cancer is the complete removal of the tumour. Surgical margin clearance in oral cancer is a critical factor which decides the local recurrence and overall survival rate. However, aggressive surgical efforts to remove cancerous regions and obtain a negative surgical margin may reduce the functionality of various organs, as well as significantly impacting the postoperative quality of life for the patient. Accurate histologic assessment of margins in oral cancer surgical resections is vital; however, the variety of anatomic sites and respective differences in surgical approach results in a lack of standardization regarding the definition of an adequate margin. Hence a quick and accurate evaluation of surgical margins can make a significant difference to survival rate.

Abstract No: 1169

Vitamin D and oral cancer: a systematic review

Dr. Sonal Jawa

Faculty of Dental Sciences, M S Ramiah University of Applied Health Sciences

Abstract

Background

Vitamin d deficiency has been identified as a potential risk factor for several health-related issues. The inverse association between vitamin d and cancer risk is well-established (breast, colorectal and prostate cancer) by way of its properties such as anticarcinogen effects, promoting cell differentiation, apoptosis and cell cycle arrest. However, its relationship with oral cancer is less understood. Oral cancers, including oral squamous cell carcinoma (OSCC), are characterized with high mortality, low survival rate and rising incidence in younger/middle age groups the well-known risk factors are smoking, alcohol consumption, chewing tobacco, betel quid, areca nut, and human papilloma virus infections. Despite the exposure to these factors, susceptibility to oral cancer varies. Therefore, identification of factors like vitamin d deficiency, that could modulate the risk of oral cancer and survival could be of importance in OSCC primary prevention and therapy.

Aim

To review the research, epidemiologic evidence, and mechanisms through which vitamin d may influence oral cancer risk or progression.

Materials and methods

A systematic review were undertaken. Medline, springer, cochrane central databases were assessed from the year 2000 to 2018. Studies evaluating the correlation between serum vitamin d levels between patients with oral cancer and healthy individuals, increased expression or mutation of vitamin d receptor in precancerous and patients with oral squamous cell carcinoma, tumor-specific up-regulation of the vitamin d catabolism enzyme (cytochrome p450 24) and with a study population of at least 20 were included. Animal studies, in vitro studies were excluded from the review.

Results/findings

This comprehensive analysis of research regarding vitamin d status, intake, and metabolism and its association with oral cancer will be analyzed and presented in the poster.

Abstract No: 1172

Evaluating efficacy of methylene blue in identification of neck sln(oscc)

Dr. Tejaswini K

AL Badar Rural Dental College and Hospital

Abstract

Background

Sentinel lymph node (sln) is the first lymph node to drain a metastatic tumour cell that drains via the lymphatic route. Mapping from the tumour site to the regional lymphatic drainage area can be used to identify the primary draining lymph node. The status of the sentinel node decides the need for neck dissection. A study to correlate the

status of clinically n0 and n1 necks with pathologically n0 and n1 necks will help in deciding the course of neck dissection.

Materials and methods

10 patients diagnosed histopathologically with oral squamous cell carcinoma were included in the study. Efficacy of methylene blue intraoperatively as an injectable medium for sentinel lymph node biopsy was established. Methylene blue was injected around the tumour at 4 sites, lymph nodes in the neck were identified based on blue discoloration and harvested.

Results

Sln were identified in all the ten cases, with an average per patient of 1.8 and standard deviation of 1.13.

Conclusion

Methylene blue dye alone can be employed successfully for sln identification in early oral cancers with good accuracy and sensitivity. This method will be of use in resource limited countries and centres where nuclear medicine facilities are not widely available. In this study, we conclude that methylene blue is a low cost, less allergic and effective dye that has shown promising results in identification of sentinel nodes in early oral cancer keeping in view of its easy availability and cost effectiveness. There was statistically highly significant difference found in lymph node status in clinical, pre op scan and post op histopathology.

Category- Miscellaneous

Abstract No: 0312

PRF in Oral and Maxillofacial Surgery

Dr. Abin Varghese

RKDF Dental College and Research Centre, Bhopal

Abstract

Platelet-rich fibrin (PRF) is an immune and platelet concentrate that contains all constituents of a blood sample favourable to healing and immunity on a single fibrin membrane. Being a reservoir of platelets, leucocytes, cytokines and immune cells, prf is reported to allow slow release of cytokines: transforming growth factor -1(TGF), platelet derived growth factor (PDGF), vascular endothelial growth factor (VEGF) and epidermal growth factor (CGF) which play a critical role in angiogenesis and tissue healing and cicatrization. This poster is an attempt to explain the various applications of prf in oral and maxillofacial surgery.

Abstract No: 0340

Human amniotic membrane in oral and maxillofacial surgery

Dr. Chhatbar Ritu Yashvant

Ahmedabad Dental College and Hospital

Abstract

Following its renaissance in ophthalmology during the 1990s, preserved human amniotic membrane (HAM) has become an attractive biomaterial for all surgical disciplines. Ham has been used in the field

of oral and maxillofacial surgery from 1969 onwards because of its immunological preference and its pain-reducing, antimicrobial, mechanical and side-dependent adhesive or anti-adhesive properties. The effects of ham on dermal and mucosal re-epithelialization have been highlighted. Typically, ham is applied after being banked in a glycerol-preserved, dimethyl sulfoxide (dms0) preserved or freeze-dried and irradiated state. Whereas the use of ham in flap surgery and in intra-oral and extra-oral lining is reported frequently, novel ham applications in post-traumatic orbital surgery and temporomandibular joint surgery have been added since 2010. Tissue engineering with ham is a fast-expanding field with a high variety of future options. This poster demonstrates current and potential uses of ham in oral and maxillofacial surgery.

Abstract No: 0358

Versatility of Collagen In OMFS

Dr. Afsal B

HKE'S S Nijalingappa Institute of Dental Science

Abstract

Collagen is the most abundant protein in the body. It provides structure and strength to the body tissue. There are many distinct types of collagen, each of which has its own unique molecular form. This unique molecular form dictates a specific function for each type of human collagen. Collagen is the major insoluble protein (fibrous protein) in the extra-cellular matrix and in connective tissues. More than 80% of the skin is composed of collagen. It is also the main component of the ligaments and tendons. In the early 1970, John F. Burke and Ioannas developed a bio-compatible collagen matrix to improve wound healing.it is commonly used in the management of burns, diabetic foot ulcer, toxic epidermal necrolysis, chronic wounds etc. This versatile material also finds its application in the field of plastic surgery, oral and maxillofacial surgery for various purposes as a wound dressing material, for coverage of small intra oral soft tissue defects of the oral cavity, as a reconstructive material for orbital floor fractures, for guided bone regeneration during maxillary sinus lift, bone augmentation of posterior atrophic mandibular ridge for placement of dental implants, for inducing bone formation along with/without certain medicaments, in treatment of localised gingival recession, as a scaffold in tissue engineering to generate dental pulp, as an interpositional graft material during palatoplasty, and much more. Therefore my poster intended to present various applications of collagen in the field of oral and maxillofacial surgery.

Abstract No: 0380

Deep temporalis fascia- is it a myth?

Dr. Priyadarshi Sengupta

Guru Nanak Institute of Dental Sciences and Research

Abstract

In the field of oral and maxillofacial surgery to deal with temporoparietal region the most important structure which guides us is the temporalis fascia. It has been widely accepted that three fascial layers exist in the lower temporal region the superficial temporalis

fascia and deep temporalis fascia:- which is separated into two layers approximately 2 to 3 cms above the zygomatic arch. The deep layer of deep temporalis fascia is between the superficial temporal fat pad and temporalis muscle. Various literatures described in various ways of the function or anatomical disposition of this deep temporalis fascia. The most vital part is to know the relationship of this fascial disposition with the facial nerve and its variation. So for us it is very important to know the myth of existence of the deep temporalis fascia and this poster contains the disposition and relationship of the so called deep temporalis fascia with other important structures.

Abstract No: 0386
Nanotechnology in Oral and Maxillofacial Surgery

Dr. Anindita Bhagawati, Dr S. C. Debnath Reader

Department of Oral and Maxillofacial Surgery, Regional Dental College

Abstract

Regenerative nanotechnology is at the forefront of medical research. Nano world is full of challenges and issues. In oral and maxillofacial surgery particularly two arenas are important - the use of multi-functional theranostic nanoparticles for head and neck cancer, and the use of nano inspired biomaterials for improving bony regeneration. New biocompatible nanomaterials, which mimic the natural structure of bone, and nanofabrication techniques are now being used in clinical practice. Nanoscaled drug delivery systems, liposomes and drug-conjugated nanoparticles for the treatment of cancer are of particular interest as they can penetrate some barriers that cannot normally be crossed by larger microparticles. The advances in nanoscience and nanotechnology for biomedical regenerative use could have far-reaching effects, and would undoubtedly have a considerable impact on, and probably shape, the future of oral and maxillofacial surgery. Surgeons should be aware this new field of nano biotechnology research, which could create new paradigms in the diagnosis and treatment.

Abstract No: 0394
A novel intra oral approach to the styloid apparatus

Dr. Rayan

Vydehi Institute Dental Sciences and Research Centre

Abstract

A novel intra oral approach to the styloid apparatus: a case report abstract.

Aim

To prove the effectiveness of approaching the styloid apparatus without a preliminary tonsillectomy approach.

Materials and methods

A 30 year old female patient reported to department of omfs with a complaint of pain in relation to right throat region since 3 years. The pain was moderate in nature, radiating to temporal region, continuous,

aggravated during winters and partial relief on taking medication. On extra oral and intra oral examination no abnormality detected, on intra oral palpation, tenderness palpated in relation to right palatoglossal arch. On radiographic examination, OPG reveals elongated styloid process in relation to right side, CBCT reveals the length of styloid process as 41.3 mm. Styloidectomy under GA was planned via an intra oral approach. Incision was placed posterior aspect of the palatoglossal arch, dissection was done to expose the styloid process, once exposed the styloid process is skeletonised and osteotomised. Closure is done using vicryl 4-0. There were no complications intra operatively or post operatively.

Result

There were no intraoperative or postoperative complications. Her postoperative course was uneventful. Healing of the incision site was found to be satisfactory. Pain in throat region was seen to reduce over time. Conclusion: to conclude, effective surgical access can be gained without a tonsillectomy procedure as is a common practice, with meticulous technique and care effective styloidectomies can be undertaken with minimal intra operative and post operative complications.

Abstract No: 0406
No More Wake Up Calls

Dr. Ayyagari Anusha

MNR Dental College and Hospital

Abstract

Background

Obstructive sleep apnea (OSA) is a sleep-related breathing disorder that involves a decrease or complete halt in airflow despite an ongoing effort to breathe. It occurs when the muscles relax during sleep, causing soft tissue in the back of the throat to collapse and block the upper airway. This leads to partial reduction (hypopneas) and complete pauses (apneas) in breathing that last at least 10s during sleep. Most pauses last between 10 and 30s, but some may persist for one minute or longer. This can lead to abrupt reductions in blood oxygen saturation, with oxygen levels falling as much as 40 percent or more in severe cases.

Objective

The objective was to review the literature and discuss the various treatment strategies available for sleep apnoea with emphasis on the advantages, disadvantages and possible new directions for treatment.

Methods

A medline search was undertaken with key words including sleep apnea, complications, numerous treatment modalities.

Conclusion

Most of the treatment modalities for correcting osa have proven useful and reliable in experienced hands. Unfortunately, the ideal treatment modalities for correcting osa still remains elusive.

References

A critical review of the treatment options available for obstructive sleep apnoea: an overview of the current literature available on treatment methods for obstructive sleep apnoea and future research directions. Alessandra J. Booth1,2*, Yasmina Djavadkhani1 and Nathaniel S. Marshall1.

Abstract No: 0417
Correction of mandibular deformity using extroral distractor in tmj ankylosis

Dr. Jadeja Kajalba Bharatsinh

M. R. Ambedkar Dental College & Hospital

Abstract

Background

Temporo-mandibular joint ankylosis is a common cause of acquired mandibular deformity in children. It can be caused by a variety of causes, trauma and infection being the most common.

Long standing TMJ ankylosis leads to damage of the condyle with deficiency of the mandibular body and ramus. The distraction osteogenesis method was published by codivilla in 1909. Ilizarov studied the radiographic, histological and biochemical changes of distraction osteogenesis of the extremities, the first case of extraoral mandibular distraction osteogenesis was reported in by Mc Carthy et al. in 1989. Since then the distraction osteogenesis technique has become the treatment of choice for mandibular deformities. Extraoral distraction osteogenesis can shorten the admission and operation time, the risk of surgery, chances of relapse, the direction and amount of bony lengthening can be controlled with soft tissue correction.

Aim

Of this poster is to present a case of rehabilitation of mandibular deformities due to TMJ ankylosis using extraoral distraction device.

Conclusion

The extraoral distraction device is an advantageous and alternative procedure in patient with TMJ ankylosis, for correction of the mandibular deformities.

Abstract No: 0474
Wilckodontics - a catalyst for rapid tooth movement

Dr. Chippada Satya Kinnera

MNR Dental College

Abstract

Background

Wilckodontics is relatively new treatment modality opening doors for successful adult orthodontics; which drastically reduces time taken for the completion of orthodontic treatment.

Aims and Objectives

In modern life there is a need for quick and effective orthodontic treatment called wilckodontics. This is a multi-disciplinary approach runs to be promising not only for reducing orthodontic treatment time but also for biological aspects during and after orthodontic treatment.

Methods

A 20 years old female patient referred to the department of oral and maxillofacial surgery with the diagnosis of lingually placed left maxillary lateral incisor. We decided to create place for lingually placed lateral incisor to align properly by creating corticotomy cuts using peizo surgery distal to the maxillary right canine.

Results/Findings

The treatment was rapid tooth movement within span of 2 months and sufficient space provided for the proper alignment of lingually placed maxillary left lateral incisor.

Conclusion

Present case manifests biological benefit of profound enlargement in envelop of motion. Reducing the treatment time and also serves as option for the growing demand of shortened treatment of adult orthodontics.

References

1. Piezosurgery[®]-assisted periodontally accelerated osteogenic orthodontics; Journal of Indian Society of Periodontics:2017 sep-oct pg 422–426.
2. Wilckodontics - a novel synergy in time to save time: a case report; International Journal of Applied Dental Sciences 2017; 3(2): 05–07.

Abstract No: 0488
Alternative intubation methods in maxillofacial surgery: an insight

Dr. Patel Yasar Siraj

H.K.E.S S. Nijalingappa Institute of Dental Sciences

Abstract

Anesthesia is the most crucial part of any surgery. Achieving airway is of utmost importance in anesthesia. Endotracheal intubation is a commonly performed operating room procedure that provides safe delivery of anesthetic gases and airway protection during surgery. The drawback of the conventional orotracheal intubation is that it doesn't allow to check intraoperative occlusion and nasotracheal intubation can't be used if the nasal bone is fractured. To overcome these, alternative intubation techniques are developed which is compatible with patient anatomy, equipment limitations, or patient pathophysiology. The choice is based on the surgical procedure, need of accessibility and comfort of a surgeon and anesthetist. Our aim behind this poster is to illustrate the choices available to a maxillofacial surgeon for intubation of the patient.

Abstract No: 0504
Role of physical therapy in management of temporomandibular disorders

Dr. Satyajit Kundu

Guru Nanak Institute of Dental Sciences and Research

Abstract

Background

Temporomandibular disorder is a musculoskeletal disorder within the masticatory system. It is a prevalent disorder most commonly observed in individuals between the ages of 20 and 40. Self-management instructions routinely encourage patients to rest their masticatory muscles by voluntarily limiting. Appropriate management of temporomandibular disorders requires an understanding of the underlying dysfunction associated with the temporomandibular joint and surrounding structures.

Methods

Physical therapy is the preferred conservative management approach for TMD. Physical therapists are professionally well-positioned to

step into the void and provide clinical services for patients with TMD. Clinicians should utilize examination findings to design rehabilitation programs that focus on addressing patient-specific impairments. Potentially appropriate plan of care components includes joint and soft tissue mobilization, trigger point dry needling, friction massage, therapeutic exercise, patient education, modalities.

Results

Satisfactory results can be achieved when management focuses on patient-specific clinical variables. Patients with TMD and concurrent cervical pain exhibit a complex symptomatic behavior that is more challenging than isolated TMD symptoms. Although routinely managed by medical and dental practitioners, TMD may be more effectively cared for when physical therapists are involved in the treatment process.

Conclusion

The most effective conservative management of TMD seems to be techniques best able to impact anatomic structures directly related to the etiology of TMD, to include the joint capsule, articular disc and muscles of mastication, specifically the superior and inferior head of the lateral pterygoid.

Ref: 1. Butts r, dunning j, pavkovich r, mettille j, mourad f. Conservative management of temporomandibular dysfunction: a literature review with implications for clinical practice guidelines. Journal of bodywork and movement therapies. 2. Shaffer sm, brismā %œ jm, sizer ps, courtney ca. Temporomandibular disorders. Part 2: conservative management. Journal of manual & manipulative therapy.

Abstract No: 0521

Propolis and its Use in Oral Surgery

Dr. Bhagyashree Jagtap

Dr. D. Y. Patil Dental College and Hospital

Abstract

Background

Apitherapy is a branch of folk medicine that aims to treat diseases with bee products, including honey. Propolis, also known as bee glue, is a natural nontoxic resinous sticky substance produced by honeybees. Propolis is a lipophilic resinous material that honeybees collect from living plants and use to seal the holes in the beehive. It has also medicinal properties, being helpful to maintain and soothe the oral cavity. Propolis has been used by humans for thousands of years for its pharmaceutical properties. It has been emphasized by several studies in addition to decrease dentinal hypersensitivity and permeability of dentin and occludes dentinal tubules it has been found to be beneficial in many aspects, including prevention of dental caries reduction of oral mucositis resulted from chemotherapy, oral cancer, gingival and periodontal diseases, plaque inhibition and anti-inflammatory. Propolis-based products have strong antifungal properties in relation to candida albicans and other types of candida species. It is used in replantation of avulsed permanent teeth and supports the healing process after a surgery in the oral cavity.

Aim

To highlight uses of propolis in oral surgery.

Methods

Search engines pubmed, google search and institutional library were used.

Conclusion

Propolis can be directly applied to the skin for wound cleansing, herpes labialis and minor burns. Propolis is also used topically as a mouth rinse to treat painful oral mucositis and oropharyngeal candidiasis and to improve healing following oral surgery. Conclusion: propolis-based preparations have a wide range of applications in various specialties of

dentistry. Evidences described in the literature on the efficacy of propolis in procedures in oral and maxillofacial region are limited. Hence, further in vitro and in vivo research about the activity of propolis on the dental cells biology should be conducted.

Abstract No: 0543

Use of platelet concentrates in oral and maxillofacial surgery

Dr. P.Venkata Lakshmi Prasanna

Government Dental College and Hospital, Vijayawada

Abstract

Platelet concentrates are innovative endogenous therapeutic agents which gained a lot of interest in different medical and dental disciplines due to their potential ability to stimulate and increase regeneration of soft and hard tissues. The effect of platelet-derived products is considered to be a result of the high number of platelets which contain a wide range of growth factors which participate in tissue regeneration, healing process and blood clot formation. They are not just therapeutic products but autologous blood concentrates containing active molecules. This e-poster provide a comprehensive overview on the development, use and efficacy of autologous platelet concentrates like platelet-rich plasma (PRP) and platelet-rich fibrin (PRF) focusing on oral and maxillofacial surgery.

Abstract No: 0547

Role of Platelet Rich Fibrin in Oral and Maxillofacial Surgery

Dr. Koduri Bhanu, V V Satyanarayana

St Joseph Dental College

Abstract

Wound healing, typically a staged process which involves the continuous activity of platelets and leukocytes. For this process to work efficiently, platelets play a vital role. The growth factors present in platelets are important to guide the regenerating cells to the area of healing. Platelet-rich-fibrin (PRF) is one such material that holds on to these growth factors enmeshed in the fibrin network resulting in their sustained release over a period of time that can accelerate the wound healing process involving hard and soft tissues. This poster highlights the benefits and role of plasma-rich fibrin in various surgical procedures in oral and maxillofacial region.

Abstract No: 0548

Obstructive Sleep Apnea

Dr. Sunnam.Swetha

Dr. Sudha & Nageswara Rao Institute of Dental Sciences

Abstract

Obstructive sleep apnea is a serious and prevalent condition with an increasing incidence. Patients with obstructive sleep apnea experience diminished quality of life. We will discuss about different treatment modalities to improve quality of life.

Abstract No: 0556
Stem cells- potential regenerative future in dentistry

Dr. Mandula Ramya

Dr.SNR SIDS, Vijayawada

Abstract

Our future dentistry will be more of regenerative based, where patients own cells can be used to treat diseases. Cells with unique capacity for self-renewal and potency are called stem cells. With appropriate biochemical signals stem cells can be transformed into desirable cells. This poster is to shortly review about the stem cells with respect to their properties, types and advantages of dental stem cells. Emphasis has been given to the possibilities of stem cell therapy in the oral and maxillofacial region including regeneration of tooth and craniofacial defects. Stem cell therapy involves manipulation of the cells in vitro and then used for therapeutic purposes. Stem cell therapy has got a paramount role as a future treatment modality in dentistry.

Abstract No: 0594
A maxillofacial surgeon's preference: a paradigm shift

Dr. Subhabrata Ghosh

Bapuji Dental College and Hospital Davangere

Abstract

The twenty-first century world is fast changing and with it there is vibrant development in the field of medicine and surgery with new techniques, equipments and materials everyday. Keeping up with these developments, maxillofacial surgeons are fast adapting to the new change and making use of the latest materials and technology which gives them a vast banquet of options to choose from while treating patients. Though success of the surgery is the main concern, factors like cost, patient compliance and ease of operating also play a pivotal role in the preference the surgeon shows while making a choice. Thus the face of oral and maxillofacial surgery is changing fast from what it was a decade back. In circumstances where it is seen that both the conventional and the newer methods of treatment are indicated the maxillofacial surgeons are choosing for the latter for instance. In recent times the advancements in implants have increased its significance over preprosthetic surgery in ridge augmentation procedures, while in reconstruction of hard tissue defects distraction osteogenesis is being preferred over free bone grafting. In closure of surgical wounds in the head and neck region, aesthetics is the main concern nowadays which has resulted in surgeons giving priority to surgical glues and absorbable subcuticular staples over conventional suturing. Though all these surgical choices are equally efficient and apt for certain specific indications, in situations where both can be used, a trend has been observed that an oral surgeon prefers the newer techniques over the conventional ones.

Abstract No: 0632
Stem cells harvested from third molar: devolution to evolution

Dr. Urvish Patel

Narsinhbhai Patel Dental College and Hospital

Abstract

Stem cells harvested from third molar devolution to evolution

Objective

The aspire to evaluate the interface of a bioactive glass scaffold with stem cells derived from dental pulp, dental follicle and periodontal ligament.

Materials and methods

Impacted third molars from three young donors were surgically removed. Stem cells derived from the dental pulp, follicle and periodontal ligament tissues were isolated and expanded. Various cells were characterized using specific cd markers. Then bioactive glass scaffolds were taken and expanded pulp, follicle and periodontal cells were then seeded on it and then cultured in osteogenic medium or basic medium. Cell adhesion, viability, proliferation and alkaline phosphatase activity were assessed.

Results

This recent study revealed good biocompatibility of the specific bioactive glass configuration tested and the osteogenic induction of cells derived from dental pulp, dental follicle and periodontal ligament. Osteogenic medium seemed to increase the differentiation pattern and dental pulp stem cells showed the most positive results compared to periodontal ligament and dental follicle stem cells.

Conclusions

Dental pulp stem cells combined with a bioactive glass scaffold and exposed to osteogenic medium in vitro represent a promising combination for future study of hard tissue regeneration in the head and neck region.

References

1. Raspini g, wolff j, helminen m, raspini g, raspini m, sãndor g. Dental stem cells harvested from third molars combined with bioactive glass can induce signs of bone formation in vitro. Journal of oral and maxillofacial research. 2018;9(1).

Abstract No: 0638
An evaluation of efficacy of microneedling therapy in management of facial scars

Dr. CH Mohana Vamsi Krishna

Sibar Institute of Dental Sciences

Abstract

Effective management of scars after the end of treatment and follow up period was noted down. The patients were also asked to evaluate the effectiveness of treatment received on a 1–10 point scale. The efficacy of derma roller treatment was thus assessed both subjectively by the patients & objectively by the observer. Aim of present study is evaluation of microneedling therapy in the management of facial scars, any adverse effects following microneedling therapy. All the patients of facial scarring were offered multiple sittings of microneedling therapy and their scars are evaluated and graded clinically and by serial photography at the start as well as at 2 months after treatment.

Abstract No: 0641
An evaluation of hair follicle transplantation on maxillofacial scar tissue - a clinical study

Dr. Pentapati Varudhini, Dr. P. Srinivas Chakravarthy

Sibar Institute of Dental Sciences & Hospital

Abstract
Introduction

Hair transplantation is a continuously evolving field. The procedure is developed by Dr. Orentreich in 1959 but he applied only to the androgenic alopecia hair has greater psychological and social importance than biological importance it has evolved into a micro surgical procedure.

Aim and objectives:

The study evaluated hair follicle transplant on maxillofacial scar tissue the objectives were taken into consideration were assessment of rate of survival, pain, donor site morbidity and patient satisfaction index.

Materials and methods

This study consisted of 10 patients aged between 17 to 30 years the loss of hair in all cases were because of scar due to trauma and surgery the follicular units were harvested in occipital region. All the patients were followed up for 6 months which were assessed and evaluated.

Conclusion

Hair follicle transplantation on scar tissue is difficult because of poor blood circulation and stiffness but our study shown 80% of survival and it can be practiced successfully in scar tissue along with precautions and proper protocol.

Abstract No: 0699
Role of tissue engineering in oral rehabilitation

Dr. Manoj Kumar Arya, Dr Girish Talreja

RUHS CODS Jaipur

Abstract

Tissue engineering is amongst the latest technologies, initially considered as a futuristic approach applied in regenerative surgery. The goal of surgical therapy is to eliminate the affected tissue and regenerate or replace the lost tissue structure. Tissue engineering is employing knowledge of tissue and molecular biology for the growth and development of new tissues using three main approaches: conduction, induction by bioactive factors and cell transplantation. Using three components: cells, scaffolds and bioactive molecules along with an adequate blood supply to regenerate many hard and soft tissues. Used in cases of severe burns in radical resective surgery, trauma, congenital malformations.

Abstract No: 0703
Recent hemostatic agents

Dr. Vinod Pal, Dr. Vinod Pal

Daswani Dental College and Research Center

Abstract

Chitosan polymers containing n-acetyl glucosamine include hyaluronic acid, chitin, and chitosan. Chitosan has been recognized as the

most effective of these for local hemostasis. It is a new generation hemostatic agent which achieves early hemostasis as well as improves post-operative healing. They do not cause any adverse reactions in shell-fish sensitive patients.

Aim

The purpose is to review the literature regarding the applications of recent local hemostatic agents in the management of bleeding in oral surgery.

Materials and methods

A total of 5 articles initial search criteria and 3 studies were finally selected.

Results

Hemostasis is an integral and very important aspect of surgical practice. The first step in bleeding control is direct pressure, and hemostatic agents should always be considered secondarily.

Abstract No: 0714
Dimpleplasty-Creating A Better Smile

Dr. Kiruba Shankar K

KVG Dental College and Hospital, Sullia, Karnataka

Abstract

Background

Dimples on cheeks enhance facial beauty and expression. Anatomically, dimples are thought to be caused by a double or bifid zygomaticus major muscle, whose facial strands insert into the dermis and cause a dermal tethering effect. Dimples can also be created surgically. There is an increasing demand for dimple creation surgery around the world. Hereby, presenting a case series of patients undergone dimpleplasty with various techniques.

Objective

Objective is to compare various techniques of dimpleplasty and to assess the depth, position and persistence of dimple for a period of 6 months.

Method

A study conducted for patients of age group 18–40 years requiring unilateral/bilateral dimple, visiting department of oral and maxillofacial surgery, KVG Dental college, Sullia using various intra oral and extra oral techniques using a bolster stitch by placing rubber tube by dissecting zygomaticus major muscle.

Finding

Dimpleplasty which is done by placing a bolster stitch extra orally using a 2–0 nylon straight needle shows scar formation and also patients discomfort in having an extra oral suture whereas, placing an intra-oral bolster stitch using nylon 4–0 reduces patients discomfort and scar formation.

Conclusion

Dimple creation surgery is a very safe and simple esthetic procedure. We, maxillofacial surgeons have an important role in improving the facial esthetics by creating a better smile by a surgically created dimple.

Abstract No: 0736
Concepts, current trends & controversies on maxillofacial injuries due to animal bites

Dr. Tasneem Shah

Azeezia College of Dental Sciences & Research

Abstract

Management of animal bites is an evidence poor area and recommendations are based on small case series, microbiological data and

expert opinion. Facial bites are complex injuries due to functional and cosmetic nature of the area, as well as the unique polymicrobial infection potential that exists. The spectrum of injury is broad and the infectious complications due to unusual pathogens are common. Prompt implementation of appropriate medical and surgical therapy for bite wounds may serve to prevent associated complications. Structured surgical management of bite wounds is the most important factor in the prevention of infections. High risk wounds must be differentiated from trivial ones. Interdisciplinary management is advisable. The philosophy regarding the management of these injuries have undergone a transformation from that of allowing the wound to heal by secondary intention to a more aggressive approach that optimizes the esthetic results by primary closure. Failure to adequately irrigate and debride the wounds is undoubtedly the most common mistake in the management of these wounds. Many of the specific therapies recommended for bite wounds are controversial with opinions on either side of most issues. The main controversies include whether wounds should or should not undergo primary closure and the use of prophylactic antimicrobials. Since great percentage of animal and human bites are located on the face, maxillofacial surgeons remain in the forefront of surgical treatment of these injuries and determine the treatment protocol.

Abstract No: 0781

PRF: a boon to bone healing and regeneration

Dr. Anirban Raha

Dr. R. Ahmed Dental College and Hospital

Abstract

Background

Platelet-rich fibrin (PRF) is a new second-generation platelet concentrate with simplified processing. It has several advantages over traditionally prepared platelet-rich plasma, which has been widely used for accelerating hard and soft tissue healing for years. Choukron's PRF incorporates leucocytes, platelets and a wide range of healing proteins within a dense fibrin matrix. It is a natural bioactive membrane which can enhance soft/hard tissue healing at the same time, can also protect surgical sites, grafted materials from external aggressions.

Objective

This e-poster aims to emphasize the bone healing and regeneration after application of prf in different sizes of osseous defects/cavities ranging from extracted lower third molar socket to small to moderate defects caused after enucleation of cysts and even larger defects caused by cystic lesions which also communicates with adjacent anatomic cavities e.g. nasal cavity, maxillary antrum.

Case report

In this e-poster 3 cases are shown. In one case prf was applied in the socket after extraction of lower third molar. In the second case PRF was applied in the osseous defect after enucleation of a cyst. In the third case enucleation of a cyst was done which showed communication with the adjacent anatomic cavity. A prf membrane was first prepared to maintain the anatomical integrity after which prf was applied in the defect. Orthopantomogram and cone beam computed tomography has been used for radiographic analysis.

Results

In the extraction case good soft tissue and bone healing occurred while in the cystic lesions satisfactory bone healing and good amount of bone regeneration occurred.

Conclusion

Prf promotes bone healing and improves quality and quantity of regenerated bone.

Abstract No: 0805

An overview of different plate designs used in condylar fractures

Dr. Abhinav Anil Kumar

M.R.Ambedkar Dental College & Hospital

Abstract

Background

Condyle fractures are one of the most controversial maxillofacial injuries. Fractures of the mandibular condyle are common and account for 25 - 35% of all mandibular fractures. Treatment of mandibular condylar fractures is one of the most discussed issues among maxillo-mandibular traumas. Closed treatment has been applied for long years and has become an accepted system due to satisfactory results in the treatment of condylar fractures. Open reduction and internal fixation (ORIF) has also become a preferred method together with the development of fixation systems. With fixation systems ranging from differently shaped plates with varying thickness to resorbable plates.

Aim

The aim of this poster is to elaborate and show different plate designs, other than the conventionally used systems that are used in internal fixation of the condylar fractures.

Materials and methods

Various studies on plate designs have been taken into account, also commercially available plates based on their reliability has been considered. Fairly new plate designs that are not widely used will also be discussed.

Conclusion

Several factors are to be considered when making therapeutic decisions: type of fracture, ramal vertical height loss, presence of teeth, associated injuries, site of fracture, occlusion, surgical skills, ease of using a particular bone plate. All these and more factors determine the selection of the plate design. So, through experience, the surgeon's convenience and for the welfare of the patient, a suitable plate design can be selected.

Abstract No: 0809

Access Osteotomy- A Multidisciplinary Approach

Dr. Visalakshi Kaleeswaran

Sree Balaji Dental College and Hospital

Abstract

Access osteotomy "a multidisciplinary approach a plethora of pathologies occurring in the cranial base and deep spaces of the neck poses a challenge owing to its anatomical complexity and difficulty in access. Access osteotomy is the answer to access the deeply situated, inaccessible lesions of the cranio maxillofacial complex (predominantly for the tumors of nasopharynx and skull base) the history of access osteotomy dates back to 1859 for the removal of nasopharyngeal polyp by von langenback. A three dimensional access to the skull base lesion is obtained through selective osteotomies which is then followed by repositioning of the bony segments and resection of the lesion. Maxillofacial surgeon plays a vital role in the multidisciplinary approach to create access for the lesions of skull base, striking a balance between preventing damage to the vital structures and complete removal of the lesions. access osteotomy provides satisfactory exposure of the lesions with minimal surgical morbidity and distortion of facial esthetics.

Abstract No: 0811 Advancements in bioresorbable plate systems

Dr. Varushi Saraswat

K D Dental College, Mathura

Abstract

Introduction

Bioresorbable and biodegradable osteosynthesis fixation have been considered an effective fixation system that offers several advantages over titanium fixation, including the absence of corrosion and of accumulation of metal in tissues and of the need to remove the implants after osseous healing; radiolucency; decreased pain and reduce stress-shielding.

Objective

New advances in bioresorbable plate systems and its advantages.

Method/materials

Developed bioresorbable osteosynthesis materials contain composite of plla as a base, an osteoconductive material such as hydroxyapatite and accelerator of bioresorption such as polyglycolic acid. First generation- polyglycolic acid; has rapid degradation which causes insufficient duration for complete bone healing. Second generation- copolymers of polyglycolic acid, poly(L-lactic acid), and poly(D-lactic acid)- rapidly bioresorbable osteosynthetic material. Third generation- u-ha/plla bioactive/resorbable; osteosynthetic material, forged composite/poly-L-lactide; directly bond to the bone and support osteoconductivity; newest advancement. Result - it stabilizes fractures, osteotomies and bone grafts. Bioresorbable plates and screws have solved the problems of stress-shielding, secondary surgery and corrosion. They are ideal for pediatric patients.

Conclusion

Based on the recent aforementioned innovation advances, these bioresorbable osteosynthesis plate systems help in clinical feasibility for both patients and oral and maxillofacial surgeons. Future advancements need more focus on reduction of foreign body reaction and enhancement of biocompatibility, mechanical strength and bioactivities or bioresorption rate/speed controllability.

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Abstract No: 0849 Cavernous sinus thrombosis – following dental foci – a case report

*Dr. Nithya Ganesh. S K, Dr. Thanvir Niazi. MDS,
Dr. Yoganandham, MDS, Dr. Effie, MDS*

CSI College of Dental Science and Research, Madurai

Abstract

Background

Cavernous sinus thrombosis (cst) is a rare but serious complication of infection of the cavernous sinuses. It is known to occur secondary to the spread of paranasal sinus infections. However, cst due to dental

origin is rare. Here we report a case of cavernous sinus thrombosis due to the spread of odontogenic infection.

Case report

A 61 years old female with poorly controlled diabetes reported to our institute with fever, headache, pain and swelling in the right cheek region. She gave history of tooth ache in the right maxillary anterior followed by swelling 20 days back. She had extracted the offending tooth but the swelling didn't subside and increased in size and extended up to the right eye. On clinical examination, she had diffuse tender, soft swelling in the right side of the face extending superiorly from the upper eye lid involving ala of the nose and inferiorly up to the lower border of the mandible. There was an irregular necrotic skin surface over the right paranasal region. Persistent pus discharge through the extracted socket was present with superadded fungal infection. Proptosis and exophthalmos was also evident in right eye. The case was provisionally diagnosed as cavernous sinus thrombosis. CT showed superior ophthalmic vein and cavernous sinus thrombosis due to pre and post septal cellulitis with endophthalmitis. The patient was admitted and empirical antibiotic therapy was initiated with parenteral vancomycin and phenytoin. Pus culture reported the presence of rhizopus species, so patient was shifted to anti-fungal drugs. But the patient denied further treatment.

Conclusion

This presentation highlights the seriousness of intra cranial complications following periapical infection. Cst is an infectious disease that is potentially fatal if it is not treated in its early stage. Even with medical advances, the mortality rate is still approximately 20%.

Abstract No: 0865 Arterial blood gas analysis - the orphaned child in surgical management

Dr. Anuj Vyas, Prashant Pillai, Gagan Thakur, Ashutosh Dutt Pathak, Richa Pathak, Abin Varghese

RKDF Dental College and Research Centre, Bhopal (M.P.)

Abstract

Surgical patients undergo a variety of pre, intra and post-operative investigations to determine the impact of surgical procedure on the physiological status of patient. One such investigation, pertinent to long duration surgeries especially trauma is arterial blood gas analysis or abg, which helps to assess the oxygenation and metabolic status of patients undergoing a surgery, as well as shift in the pH and concentration of gases. Although the stress of monitoring abg often lies in the domain of anesthesia team, but the decision making for fluid replacement remains in the purview of surgery team. Thus, the two important arms of operating room need to be well informed about the abg status of patient in assessing any underlying condition and correcting the same promptly. How to draw the sample for abg is of paramount importance to any surgical trainee or consultant. This presentation aims to throw light on the importance of arterial blood gas analysis, sample collection techniques as well as its interpretation in operating rooms. The objective of discussing abg analysis is to dwell back a little in the world of acid base metabolism and gaseous exchange and correlate the relevance of these values in surgical and post-surgical management.

Abstract No: 0873**Burnout syndrome: a risk to maxillofacial surgeons health**

Dr. Panchal Darshalkumar Dineshchandra

Narsinhbhai Patel Dental College and Hospital, Visnagar

Abstract

Shame is an ineffective tool in residency education that often results in depression, isolation, and worse patient care. This study aimed to assess burnout, depersonalization, and personal achievement levels in current oral and maxillofacial surgery (oms) residents, to assess the prevalence of the use of shame in oms residency training, and to determine whether there is a relation between shame exposure and resident burnout, depersonalization, and personal achievement levels. The clinical manifestations of burnout syndrome are 1. Physical symptoms of stress, tiredness, fatigue, sleep & GIT disturbances, headache, hypertension 2. Emotional events irritability, frustration, confusion, aggressive behaviour 3. Behavioural events increased consumption of coffee, alcohol & drugs, addictive behaviour, poor personal performance, emotional detachment & frequent inter-personal conflicts emotional burnout, depersonalization, and lack of self-confidence are common during residency training. These factors have been studied and quantified by Maslach et al. Maslach et al. defined burnout as a syndrome involving chronic fatigue, emotional exhaustion, and fatigue at the very idea of work. Depersonalization was defined as a dehumanization in interpersonal relations, in which the clinician becomes detached from others. In depersonalization, the clinician experiences a lack of empathy for patients, guilt, and withdraws from social contact. If unaddressed, burnout and depersonalization can lead to a perceived decrease in personal achievement, in which the clinician doubts his or her abilities and capacity for success. There is a clear relation between the number of shame events and burnout and depersonalization levels. It is important to understand the negative impact that the experience of shame has on residents, including its unintended consequences.

Reference

1. Published by Elsevier Inc On Behalf of the American Association of Oral and Maxillofacial Surgeons (2017) *J Oral Maxillofac Surg* 75:449–457.

Abstract No: 0889**Access Orbitotomy**

Dr. Nanadath Amitha Ajith, Arun Kumar. M

Tamil Nadu Government Dental College and Hospital

Abstract**Introduction**

Lateral orbitotomy is a well recognised method of improving orbital access for the removal of orbital tumors and foreign bodies and has been used in orbital decompression in eye diseases

Aims and objectives

A number of pathologies are encountered in inaccessible areas of head and neck region. Surgical resection of these hidden lesions often possess a great surgical challenge owing to the anatomical complexity, difficulty in accessibility and proximity to the vital

structures. Access osteotomies of the craniofacial skeleton is the answer to access these deeply located inaccessible tumors. It allows mobilization and reposition of the bony fragments.

Methods

Various approaches to the orbital lesion has been described in literature such as extra cranial and transcranial approaches. Extracranial approach include lateral, inferior, anterior, antero medial and transthemoidal orbitotomies. Hereby presenting case reports of two patients with lateral retro bulbar lesion who were treated and the mass excised with lateral orbitotomy approach.

Conclusion

Thus lateral orbitotomy is a safe approach particularly if the lesion is located superior, lateral and inferior to orbital cone as it is minimally invasive compared to the transcranial approach.

Abstract No: 0907**Maxillofacial surgical management in pregnant patient**

Dr. Syed Vizarat Ali Syed Mubarak Ali

Maharanaprataap College of Dentistry and Research Center Gwalior

Abstract

Maxillofacial surgical management in pregnant patient Abstract-purpose of this poster is to update maxillofacial surgeons about management of pregnant patient. Pregnancy results in physiological changes, which influence the treatment planning. These alterations are sometimes subtle but can lead to disastrous complications if proper precautions are not taken. Understanding these changes is essential for providing quality treatment. The general principles which are essential are discussed, followed by physiological changes during pregnancy (like in cardiovascular system, hematological system, respiratory system, gastrointestinal system, genitourinary system) & their treatment implications, dental conditions which are common during pregnancy, the risk of various medications to the mother & foetus, appropriate timing of oral & maxillofacial surgery during pregnancy & management of emergencies during pregnancy.

Key reference:-turner m.,aziz sr. Management of the pregnant oral and maxillofacial surgery patient.j oral maxillofacial surg;2002;60:1479–88.

Abstract No: 0912**Facial nerve identification during parotidectomy**

Dr. Vigneshwar.S

Maharaja Ganga Singh Dental College

Abstract

Any surgical procedure involving the parotid gland requires precise identification of the facial nerve (cranial nerve vii). When no previous surgery has been performed on the parotid gland and in the parotid region, the facial nerve is identified at its third segment, as it leaves the stylomastoid foramen(sm). This segment of the nerve is also called the facial nerve trunk. A good knowledge of the anatomical landmarks of the facial nerve in the smf is essential in order to identify the nerve before it enters the parotid gland. The three reliable landmark to identify the facial nerve trunk are 1. The tympanomastoid

suture 2. The cartilaginous part of the external auditory canal, more precisely the tragal cartilage and 3. The posterior belly of diaphragmatic muscle. There are two approaches to identify the facial nerve trunk during parotidectomy, conventional antegrade dissection of the facial nerve, and retrograde dissection. Avoiding any inadvertent injury to the facial nerve, during parotidectomy is our primary importance because the resulting paralysis can severely affect facial expression, swallowing, speech, eye closure, and the social life of the patient. The aim of this presentation is to put forward our primary goal of facial nerve identification and preservation of the same during parotidectomy.

Abstract No: 0931
Reduction glossectomy for macroglossia - a case report

Dr. Mohd Moiz Ahmed, Dr.M.Suresh Kumar

Meghna Institute of Dental Sciences

Abstract

Macroglossia is a generalized term to describe the tongue that protrudes beyond the teeth during natural resting posture. When a primary disorder of tongue tissue leads to macroglossia, it is termed as true macroglossia and when affected secondarily such as by amyloidosis, it is referred to as relative macroglossia. Macroglossia in case of syndromes and genetic conditions, only symptomatic surgery for esthetic and functional purpose is possible. In such cases, the goal of surgical intervention will be to reduce the bulk of tongue with maximum possible preservation of form, motor, and sensory function. In this poster, we are presenting a case report of a 25 year old male patient who complains of difficulty in speech. On examination he was diagnosed as a case of true macroglossia with a positive family history. Reduction glossectomy was performed using a modified resection design to form a rough clover shaped design. The anterior and the posterior portion of the design was approximated in such a way reducing the width and length of the tongue preserving the tip and the lateral borders of the tongue. There is no single ideal tongue resection procedure in literature, rather the procedure needs to be customized considering the etiology, age, gender, existing dimension, and postoperative form/dimension desired. Such individual approach gives more pleasing results than the predetermined ones.

Abstract No: 0953
Antiresorptive drug-related osteonecrosis of the jaw

Dr. Aananya Mishra, Dr Dharnappa Poojary

Manipal College of Dental Sciences, Mangalore

Abstract

Topic

Antiresorptive drug -related osteonecrosis of the jaw.

Background

Osteonecrosis of the jaw (onj) is a debilitating condition of the jaw and is defined by task force of the american association of

maxillofacial surgeons on 2006 and published on 2007, as the presence of bone exposure in the oral cavity for more than 8 weeks refractory to treatment, current or previous history of bisphosphonate use, no evidence of malignancy, and no prior radiotherapy to the affected region. Until recently, bisphosphonate related osteonecrosis of the jaw (bronj) was considered a rare bone disease in patients receiving bisphosphonate treatment. The recent development of onj in patients taking denosumab suggests that the pathogenicity of bronj, or the newly termed antiresorptive drug-related osteonecrosis of jaw (aronj) is multifactorial. Aronj is a complication in cancer patients with bone metastases and patients with osteoporosis who were treated with antiresorptive agents, like bisphosphonates and denosumab. Aronj is a recently developed concept which was adapted and recommended by the 2008 american dental association (ada) council on scientific affairs. The ada council recommended that all cases related to the administration of antiresorptive agents be termed aronj.

Aim

A review poster to enlighten and analyze the adverse effects of anti-resorptive drugs and methods to prevent them.

Conclusion

Anti-resorptive medications are used in the management of metastatic disease of bone and in diseases of altered bone turnover. With time, more physicians will place patients on antiresorptive medications for the management of osteoporosis and cancer. Stage-specific management strategies have been developed as well? As guidelines for evaluating the potential risks associated with this complication. Implementation of well-planned prevention strategies and establishment of an early diagnosis will help in preventing or reducing the morbidity associated with aronj.

Abstract No: 0957
Carnoy's Solution

Dr. R. Sasikumar, Dr.Ashwan, Dr.Mohammed Afrad, Dr.Lavanya

Thai Moogambigai Dental College & Hospital

Abstract

Carnoy's solution, a chemical cauterization agent. Carnoy's solution described by Voorsmit (1981) contains 100% ethanol, chloroform, and glacial acetic acid in a 6:3:1 ratio with added ferric chloride. This chemical composition provides a tissue fixation property used in histology and a tissue cauterization property utilized in chemical curettage. Carnoy's solution is used in the treatment of various aggressive cyst and tumors in the maxillofacial region and in management of ameloblastoma, okc, ossifying fibroma. Carnoy's solution is used to halt the biochemical reactions in the cell during cell division and it enhances lymph node detection during an anatomical dissection study in cadavers. Chloroform is no longer recommended due to its carcinogenic potential. Carnoy's solution penetrates the bone to a depth of 1.54 mm after a 5-minute application. It is difficult to obtain and needs to be mixed fresh. It does not fixate the inferior alveolar nerve, but some clinicians cover the nerve with petroleum jelly as a caution. Hence this poster highlights the significance of carnoy's solution in the maxillofacial surgery.

Abstract No: 0977
Autologous Blood Transfusion

Dr. Akshay Ragit

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 495001 Chattisgarh*

Abstract

Autologous blood transfusion Abstract- blood transfusion is the process of receiving blood or blood products into ones circulation intravenously. It is usually done as a life saving maneuver to replace blood cells or blood products. There are three types of blood transfusion which includes red blood cell transfusion,platelets and clotting factor transfusion and plasma transfusion. Autologous blood transfusion designates the reinfusion of blood or blood components to the same individual. Allogenic blood transfusion is the process of receiving and infusing the blood of compatible donor i.e. either from other individual or blood bank with same blood group. Allogenic blood transfusion leads to the high risk of infection, acute hemolytic reactions, transmission of disease and allergic reactions. Autologous blood transfusion reduces the need for allogenic transfusion and is most widely used in elective surgery. It eliminates the risk of viral transmission mediated haemolytic reaction allergic reactions and febrile reaction transmission of diseases like hepatitis,syphilis,aids,etc., it promotes blood cell production by bone marrow and erythropoiesis, also the patients with rare blood groups are particularly benefited by this technique. The purpose of this poster is to present the proven alternative to homologous blood transfusion in elective major surgery avoiding adverse effects of homologous transfusion.

Abstract No: 0982
Basic Life Support

Dr. Saravanan

Raja's Dental College & Hospital

Abstract

Background basic life support (bls) includes recognition of signs of sudden cardiac arrest (sca), heart attack, stroke, foreign-body airway obstruction (fbao) and activation of emergency responsive system and management through early cardiopulmonary resuscitation (cpr), and defibrillation with an automated external defibrillator (aed). It is very important that every person in the community must know about bls to save lives and improve the quality of community health.

Objectives

The purpose of bls is to maintain adequate circulation and ventilation until action can be taken to reverse the underlying cause of the cardio and respiratory arrest. Failure of circulation for 3–4 min will lead to irreversible cerebral damage. Cpr also enhances the circulation to brain so cpr is better termed cpcr (cardio pulmonary cerebral resuscitation).

Method

In cpr compression/ventilation ratio for all age group with single rescuer is 30:2. With 2 rescuer the ratio for adults is 30:2 and for children and infants it is 15:2. Compression depth for adults is 2.4 inches, for children 2 inches and for infants 1½ inches. Compression rate should be at least 100–120/min. Ventilation for all age group is 1 breath every 6 s.

Conclusion

Understanding bls procedures and more than that, practicing these techniques is the most challenging task confronting first aid. Taking this into consideration, bls should be considered an essential aspect of the medical curriculum.

References

1. Adult basic life support and cardiopulmonary resuscitation quality 2015 american heart association guidelines update for cardiopulmonary resuscitation and emergency cardiovascular care, Monica E. Kleinman, et al.

Abstract No: 1004
New Advances in Local Anesthesia

Dr. Farhin Jamal

New Horizon Dental College and Research Centre Bilaspur, Sakri

Abstract

The most important skills required in dental and surgical practices is the ability to provide safe and effective local anesthesia. Although local anesthesia remains the backbone of pain control researches are still going to seek the newer and better means of managing pain. The purpose of this poster is the recent advances in local anesthesia which includes the vibrotactile devices,computer controlled local anesthetic delivery system, jet injector, safety dental syringes and intra osseous anesthesia.

Reference

1. Milgrom P, Weinstein, Getz T 2nd ed Al Omari WK Ring Me.

Abstract No: 1005
Different Surgical Management of Obstructive Sleep Apnea

Dr. Akshat Sharma

Babu Banarashi Das College of Dental Sciences

Abstract

Different surgical management of obstructive sleep apnea. Obstructive sleep apnea is a common disorder characterised by repetitive episodes of nonctunal breathing cessation due to upper airway collapse during sleep. It causes severe symptoms such as hyper somnolence and is associated with a significant cardiovascular morbidity.different treatment options,conservative as well as surgical are available for this disorder. Conservative options are oral appliance therapy,external nasal support devices,cpap and other various method.cpap is still recognised as the gold standard of conservative treatment. Surgical treatment option include uvulopalatopharyngoplasty,nasal sugery,maxillomandibular advancement surgery is very efficacious in eliminating osa by enlarging the pas and tightening the upper airway muscles and tendons by advancement of their bony origin. A multidisciplinary approach is necessary for an accurate management of the disease. This poster attempts to highlight various surgical methods for the treatment of obstructive sleep apnea.

Abstract No: 1007
Worse or Reverse?

Dr. Nidhi Pandey

YMT Dental College and Hospital

Abstract

Worse or reverse? Local anesthetics are an integral part of dental and medical practice since they have proven their roles in intra operative and post-operative periods. However, the persistent residual soft tissue anesthesia, that can last anywhere from 3 to 5 h after a routine dental procedure is often regarded as an undesired and unpleasant experience for many patients. Patients often express their difficulty to speak, smile, eat and drink and may even have uncontrollable drooling of saliva. The lingering numbness can lead to soft tissue injury, especially in children and patients with special healthcare needs. An injectable form of phentolamine mesylate an alpha-adrenergic antagonist, has been shown to block the vasoconstriction associated with the epinephrine which is commonly used in dental anesthetic formulations. It thus enhances the systemic absorption of the local anesthetic from the injection site at the end of the procedure. This paper will review and study the clinical outcomes of using injectable phentolamine mesylate to terminate the residual soft tissue numbness of local anesthetics when it is no longer desirable.

Abstract No: 1038
New Age Sutures

Dr. Saipooja R

SCB Dental College and Hospitals Cuttack

Abstract

Surgical sutures are used to facilitate closure and healing of surgical- or trauma-induced wounds by upholding tissues together to facilitate healing process. There is a wide range of suture materials for medical purpose and the main types include absorbable and nonabsorbable. Recently, there is a growth in the development of classes of suture materials based on their properties and capabilities to improve tissue approximation and wound closure. This review outlines and discusses the current and emerging trends in suture technology including knotless barbed sutures, antimicrobial sutures, bio-active sutures such as drug-eluting and stem cells seeded sutures, and smart sutures including elastic, and electronic sutures. These newer strategies expand the versatility of sutures from being used as just a physical entity approximating opposing tissues to a more biologically active component enabling delivery of drugs and cells to the desired site with immense application potential in both therapeutics and diagnostics.

Abstract No: 1046
Imaging & its impact on maxillofacial surgery: the timeline

Dr. Shahbaaz Alimoddin Naikwade, Dr.B.M.Rudagi

ACPM Dental College & Hospital, Dhule

Abstract

Maxillofacial imaging has had an unparalleled impact on oral and maxillofacial surgery in past 100 years. In past 20 years, the practice of oral and maxillofacial surgery has been most affected by advances in imaging with its profound impact on beyond diagnosis to planning and execution of treatment. Different modalities used in maxillofacial imaging include intraoral radiographs, panoramic radiographs, tomography, cephalograms, CBCT, CT, MRI, ultrasound, radionuclide imaging. Entire evolutionary phase of maxillofacial imaging can be divided into 3 timelines. -imaging for diagnosis:conventional radiography, tomography, orthopantomography, cephalometry. - era of advanced imaging:computed tomography, digital radiography, magnetic resonance imaging, nuclear imaging studies. - era of 3d imaging:3d ct and stereolithography, intraoperative ct and vsp, cbct. - future directions: mri, neurography and molecular imaging. All these recent advancements have made a significant contribution in fields of -complicated impactions. -dental implants. -odontogenic pathology. -osteonecrosis of jaw. -fibro-osseous lesions, cysts, tumors. -TMJ imaging. -obstructive sleep apnoea. Newer trends in maxillofacial imaging also have had a huge impact on maxillofacial trauma assessment and management. -multidetector ct has proved to be of great worth in setting of suspected maxillofacial trauma and also technique of choice in orbital and ocular injuries. -multiplanar reformations and 3-d reconstructions aid in evaluation of facial fractures.

Abstract No: 1057
Antibiotic prophylaxis in prevention of infective endocarditis-current dilemma

Dr. Meghna Chandrachood

PMS Dental College and Research Institute

Abstract

There are few patient subpopulations for whom antibiotic prophylaxis is indicated prior to dental procedure because of certain conditions. Overtime guidelines have evolved and updated studies have been published regarding the antibiotic regimen for treating such conditions. Antibiotic prophylaxis, if 100% effective, likely prevents only a small number of cases of endocarditis. Frequency and magnitude of bacteremia associated with dental procedures and routine daily activities like tooth brushing and flossing are similar. In view of this aha has recommended antibiotic prophylaxis only for patients with high

risk cardiac lesions, in conjunction with dental procedures wherein there is manipulation of gingival tissue, periapical region of teeth or perforation of oral mucosa. The poster provides an overview of the guidelines advised over years, its updation and the current dilemma and status of giving an antibiotic prophylaxis along with sound clinical judgement.

Abstract No: 1073

A surgical management to good night sleep: osa management

Dr. Shaurya Verma

Dayanada Sagar College of Dental Sciences and Hospitals

Abstract

Obstructive sleep apnoea is the narrowing of upper airway during sleep leading to hypopnoea or apnoea. It is a potentially life threatening condition characterised by repeated collapse of the upper airway during sleep with periodic cessation of breathing for more than 10 s. The etiology is multifactorial and its clinical manifestations to name a few are night snoring, headache when the patient wakes up, daytime sleepiness and decrease in cognitive performance. It remains largely underdiagnosed despite evidence that it is an independent risk factor for cardiovascular and neurological morbidity and mortality. Obstructive sleep apnoea is now considered a public health problem as it not only affects a person's health but also his lifestyle and social well being. There are wide modalities for the diagnosis and treatment of obstructive sleep apnoea but the gold standard are polysomnography and nasal continuous positive airway pressure. The treatment of obstructive sleep apnoea is multidisciplinary and the choice of therapy depends on the etiology, severity and natural history of increased upper airway resistance. The surgical treatment involves correction of the underlying cause with the help of procedures like adenotonsillectomy, hyoid elevation, maxillomandibular advancement, nasal surgery to name a few. The non surgical line of treatment involves the use of oral appliances, behaviour and diet modification. This poster deals in detail primarily with the surgical methods of treatment of obstructive sleep apnoea along with the non-surgical ones.

References

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Abstract No: 1091

Nosocomial infection: a case report

Dr. Steena Alex, Dr. Eapen Thomas

Pushpagiri College of Dental Science Perumthuruthy, Thiruvalla

Abstract

Nosocomial infections are a continuing danger in care of surgical patients. These infections place a severe strain on the health care system and contribute significantly to patient morbidity and mortality. Excessive use of antibiotics, general health status of the patient and defective aseptic

hospital care are predisposing factors. The agents that are usually involved in hospital acquired infections include streptococcus spp, enterococci, pseudomonas aeruginosa, coagulase negative staphylococci, staphylococcus aureus, bacillus cereus, legionella and enterobacteriaceae family members namely proteus mirabilis, klebsiella pneumonia, escherichia coli, serratia marcescens and other multi drug resistant nosocomial organisms including methicillin resistant staphylococcus aureus, vancomycin resistant enterococci, pseudomonas aeruginosa and klebsiella pneumonia, whereas clostridium difficile shows natural resistance. Nosocomial pathogens can be transmitted through person to person, environment or contaminated water and food, infected individuals, contaminated health care personnel's skin or contact via shared items and surfaces. Early diagnosis and prompt target specific antimicrobial therapy and overall general health care of the patient are the key to successful management of nosocomial infections. Management of a case of nosocomial infection in a polytrauma patient with panfacial fracture is presented.

Abstract No: 1131

Botox in Gummy Smile

Dr. Vonchibeni Kithan

Shree Bankey Bihari Dental College, Ghaziabad

Abstract

Background

A face look is never complete without a perfect smile. Excessive gingival display or a gummy smile is defined as 2 mm or more of gingival exposure upon smiling, which is often esthetically displeasing. Recently world wide the use of bot (botulinum toxin) or commonly known as botox, which is a neurotoxic protein produced by the bacterium clostridium botulinum. Botox has been advocated in treatment of gummy smile, in which minimally invasive injection of botox into the hyperactive muscle of upper lip reduces the upward movement of lip thus, resulting in less of gummy smile.

Aim

The aim was to evaluate the effect of botulinum toxin (botox) injections as a conservative treatment for gummy smile.

Method

A 22 year old female patient presented with a gummy smile with 4.5 mm excessive gingival display. A clinical examination revealed hypermobility of the upper lip. She received botox type I, injected on each side 2 unit on yonsei point.

Result

The improvement in the gummy smile was shown 2 weeks after botox injection. A significant decrease in the amount of gingival display was noticed before and after giving the injection.

Conclusion

Botox type I is an effective temporary conservative technique to improve gummy smile caused by muscular hyperfunction.

Abstract No: 1134

The Oxygen Revolution

Dr. Karishma Motwani

YMT Dental College & Hospital, Navi Mumbai

Abstract

Oxygen has been used successfully to treat wounds for more than 30 years. It is a prerequisite for successful healing. Hyperbaric oxygen

therapy (hbot) takes advantage of the fact that oxygen is transported in the blood; increasing atmospheric pressure maximizes tissue oxygenation, thus stimulating wound repair. Physiological effect of hbot is based on a dramatic increase in the amount of dissolved oxygen. It subsequently induces growth of new vessels, restores tissue homeostasis, enhances white blood cells function and enhances effect of antibiotics. This makes it the preferred choice in treatment of hypoxia, hypocellularity and hypovascularity. Several other indications are air or gas embolisms, carbon monoxide poisoning, decompression sickness, compromised grafts and flaps, necrotising infections, osteomyelitis and delayed radiation injury. Irradiated patients presenting with unavoidable dental surgical procedures can benefit from pre-and-post-operative dives to prevent necrosis of the jaws. Besides its prophylactic role in cases with frequent altitude changes, hbot also has a remarkable therapeutic effect in established osteoradionecrosis. It promotes healing of the oral lesions, decreases pain, and improves trismus and muscle stiffness. Hbot should be considered in early infective processes that are resistant to initial treatment and must be considered as an adjuvant treatment in refractory mandibular/jaw osteomyelitis, in combination with antibiotics and debridement. Addition of hbot obviates the need for frequent surgical procedures and promotes early mobilization of the patient. It is a safe and reliable treatment with very few contraindications and side effects. However, experimental applications of hbot in cases of auto-immune disorders and malignancies is still undertrial and thus it is a treatment protocol that demands further exploration for expanding its scope in the field of maxillofacial surgery.

Abstract No: 1185

Management of needle stick injuries

Dr. Beegum Sumayyah Abdul Nasar

PMS College of Dental Science & Research

Abstract

Needle stick injuries are common occurrence in the health care profession especially in dentistry. In response to the risk of exposure, the focus should be more on primary prevention as a means of reducing the incidence. Thus the probability of cross infection can be reduced. The main aim of this presentation is to provide current scientific information about the risk of needle stick injuries and how to manage in case of an incidence. The poster includes: the risk of infection after a needle stick injury, primary pathogens transmitted, role of vaccination & protocol to be followed after needle stick injury.

Abstract No: TR1489

Newer trends in pain management in oral and maxillofacial surgery

Dr. Swathi

A J Institute of Dental Sciences, Mangalore

Abstract

Pain relief has significant physiological benefits, hence monitoring of pain relief is increasingly becoming an important postoperative

measure. Pain is the consequence of the interplay of numerous chemical mediators and a dynamic and plastic neuronal system. So pain prevention and management requires the use of different classes of analgesics and anesthetics that act by different mechanisms and at different sites of action. This e-poster describes the newer trends in pain management in oral and maxillofacial surgery. To conclude the management of pain can be challenging in the field of oral and maxillofacial surgery. But significant improvement can be made to patients experience by considering the appropriate pain management maneuver.

Abstract No: TR2822

Needle stick injuries in dental office

Dr. Kanimozhiy Senguttuvan, Dr. Vandana Shenoy, K Dr. Satish kumar C.S.C, Dr. Mohammed Afrad

Thai Moogambigai Dental College and Hospital

Abstract

A needle stick injury is an accidental skin penetrating stab wound from a needle containing another person's blood or body fluid. Needle stick injury (NSI) is a major occupational hazard among health care workers. Health care workers remain susceptible to deadly viruses throughout the year, including blood-borne pathogens. Compared to many other healthcare settings, dental professionals are at higher risk of acquiring infections due to the fact that dentists work in a limited access and restricted field of visibility and frequent use of sharp instruments. Needle stick injuries (NSI) has always been one of the most important risk factor for healthcare workers (hcws) for transmission of various infections such as hepatitis b, hepatitis c and human immunodeficiency virus (HIV). Blood-borne exposures can be career and life-ending. The routine use of sharp instruments in dental treatment, the presence of blood and saliva, and the diverse bacterial flora in the oral cavity contribute to the hazardous nature of the dental workplace for blood-borne infections. Preventing needle stick injury is a challenge faced in virtually every medical workplace. In a dental environment, the burden of needle stick injury can be reduced when a dental professional abides by the current and universally accepted standard precautionary measures against needle stick injuries. Every healthcare facilities should have an infection control program. The knowledge and awareness regarding needle stick injuries among healthcare workers also play a major role in preventing it.

Abstract No: TR5335

Hilotherapy....Cool Heal THE Face !

Dr. Bhakti Deepak Patil

Indhira Gandhi Institute of Dental Science, Pondicherry

Abstract

Hilotherapy delivers cooled water to the face at 15 degrees c and reduces the postoperative recovery time. Craniomaxillofacial procedures including oral surgery, orthognathic surgery, facial fracture management and aesthetic facial surgery have immediate postoperative sequel like pain, oedema, ecchymosis and functional limitations. Hilotherapy may provide a means to reduce the postoperative

convalescent period, whilst avoiding the side effects of conventional analgesia. The purpose of this poster is to discuss the role of hitherto therapy postoperatively for craniomaxillofacial procedures.

Abstract No: TR6409

Music therapy - effect on trauma patients during arch bar application

Dr. Aravindh R

Indhira Gandhi Institute of Dental Science, Pondicherry

Abstract

Immobilization is the most important part of facial bone fracture treatment. Bandaging of the fractured mandible was the first immobilization device used in ancient Greece. Patients undergoing Erich's arch bar fixation usually fear pain. Increased levels of preoperative anxiety are known to be associated with an increased need for intraoperative anesthetics, higher perioperative perception of pain. In addition, this psycho-emotional instability can induce hemodynamic changes. Psychological interventions to control perioperative anxiety have been studied as an alternative to drug therapy. Among these types of interventions, music therapy during surgery has been reported to be a non-invasive, inexpensive, and effective means of controlling perioperative anxiety levels in patients. Musical interventions affect not only physiologic domains of patient functioning, such as BP, heart rate (HR), and respiratory rate (RR), but also emotional domains, such as perioperative anxiety levels and pain thresholds. Because patients are continuously exposed to auditory stimuli during Erich's arch bar fixation under local anaesthesia, including the alarming sound of monitoring systems, the metallic sound of surgical instruments, and the professional conversations of surgical staff members, musical interventions have the additional benefit of decreasing exposure to fearsome noises in the operation room. In musical interventions to decrease anxiety levels in patients undergoing Erich's arch bar fixation surgery, the type of music, volume of the music, and in particular patients' musical preferences to music should be considered. Since we have been using for an year, the results found to be excellent. Alternative way of approaching the treatment gives better perspective of managing treatment rather than only by routine pharmacological means.

Category – Oral Maxillofacial Pathology

Abstract No: 1039

Targeted therapy in odontogenic keratocyst using 5-fu surgical feasibility

Dr. Rizwana Fathima, Prof J Naveen Kumar

Sri Ramachandra -Faculty of Dental Sciences

Abstract

The drug 5-fluorouracil (5-fu) is used in the treatment of various cancers because of its antimetabolite properties. It is also proven various studies that OKCs would respond to 5-fu treatment because of

its similarities in molecular etiopathogenesis of some cancers. 5-fu treats OKC with less postoperative morbidity. This poster highlights the use of 5-fu in patients diagnosed with OKC who reported to our institution, its technical feasibility and morbidity.

Abstract No: 1052

Coronoidectomy necessary in treatment of OSMF with nasolabial flap

Dr. Sumeet Shinde, Dr Gokul Venkateshwar

University, School of Dentistry, Navi Mumbai

Abstract

Background

Oral sub-mucous fibrosis is an insidious, chronic, disabling disease of obscure etiology affecting the entire oral cavity, larynx & sometimes the pharynx. It is treated with various surgical modalities.

Aim & objectives

To compare the outcomes of nasolabial flaps vs nasolabial flap with coronoidectomy for reconstruction of intra-oral defects after release of oral sub-mucous fibrosis.

Methods

20 healthy individuals were selected with oral sub-mucous fibrosis patients were divided into 2 groups. Group a: 10 patients were treated with nasolabial flap with coronoidectomy. Group b: 10 patients were treated with nasolabial flaps.

Finding

In group a, mean increase observed was more than group b. 1 case of relapse was reported in group b. Conclusion: In long-term, advanced (stage III–IV) OSF associated with betel quid, the standard surgical treatment protocol consisting of resection of fibrous bands, coronoidectomy and masticatory muscle myotomy followed by nasolabial flap grafting is a promising procedure thereby providing long-term, relapse-free results.

Abstract No: 1058

Aneurysmal Bone cyst- an unusual rare case report

Dr. M.Veeramuthu, Dr.D.Durairaj MDS

Adhiparasakthi Dental College and Hospital, Melmaruvathur

Abstract

Aneurysmal bone cyst is a benign tumor-like lesion that is described as an expanding osteolytic lesion consisting of blood-filled spaces of variable size separated by connective tissue and osteoclast giant cells. It is frequently accompanied by multiple cystic lesions and aggressive bone destruction caused due to trauma, intramedullary hematoma, alterations in local hemodynamics, reactive malformation and genetic predisposition. This lesion occupying approximately only 1.5% of all non-odontogenic and non-epithelial cysts of the jaw, aneurysmal bone cysts are extremely rare with an incidence of 0.5%. About 50% of the aneurysmal bone cysts are reported in long bones and vertebral column. Only 2% has been reported to involve jaw bones. We report an interesting case of an aneurysmal bone cyst involving the mandible of a 14-year-old boy who reported with a chief complaint of swelling in the left side of the face for the past 4 months, which was tender, non-fluctuant and hard in consistency. Swelling measured about 10x8 cm in size. Radiographic examination revealed a large expansile,

multinodular lesion, suggestive of a benign odontogenic tumor. Left hemimandibulectomy of mandible was done and the final histopathologic diagnosis of aneurysmal bone cyst was given. This poster gives an overview of this rare case of aneurysmal bone cyst of mandible, followed by a review of the literature.

Abstract No: 1063
Pleomorphic adenoma -a case report

Dr. Shashank

Sree Balaji Dental College and Hospital

Abstract
Background

Pleomorphic adenomas are benign salivary gland tumors, which predominantly affect the superficial lobe of the parotid gland. The pleomorphic nature of the tumor can be explained on the basis of its epithelial and connective tissue origin. The tumor has a female predilection between 30 - 50 years of age. Slowly progressing asymptomatic swelling is the usual presentation of the tumor. Surgical excision of the tumor mass forms the mainstay of treatment, with utmost care taken to preserve the facial nerve.

Case details

This case report aims to throw light on an interesting case of pleomorphic adenoma of the parotid gland in a 35 years old female patient. The patient presented with a slowly progressing asymptomatic swelling on the left side of the face. There is also a special emphasis to a detailed review of literature.

Conclusion

Salivary gland neoplasms can occur at any site where salivary tissue is present. Pleomorphic adenoma is the commonest salivary gland tumor characterized by diverse histomorphological features. Early diagnosis and treatment plan entails thorough history taking, clinical examination, coupled with radiographic and histopathological findings.

Abstract No: 1072
Odontogenic infections leading to mediastinitis

Dr. Sunnam Madhavi

MNR Dental College

Abstract

Odontogenic infection is an infection that originates with in a tooth or in closely surrounding tissues, and extend beyond natural barriers and results in a potentially life threatening complications. Spread of odontogenic infection potentially from lower third molars to various facial planes of the neck leads to the mediastinitis, with reported 30% to 40% mortality rate. The aim of the study is about proper understanding of disease process from retropharyngeal space and spreads into the posterior mediastinum, diaphragm. These patients are diagnosed with potential complications such as upper airway obstruction, rupture of the retropharyngeal space, abscess and aspiration of pus to the lungs and asphyxiation. Several factors that contributes to the high mortality includes, rapid spread of infections, delay in making the diagnosis, poor general health, generalized sepsis and major

respiratory and cardiac complications. Effective mediastinitis management requires appropriate airway management, drainage of the regions affected by the disease, broad spectrum antibiotic therapy guided by culture of drained pus. CT scanning in addition to clinical findings aids assessment of disease progression.

Abstract No: 1086
Pleomorphic variant of scl of left parapharyngeal space

Dr. Narwade Pallavi Uddhav

PGIDS,Rohtak Haryana

Abstract
Introduction

Intra oral lipomas are common benign neoplasms accounting 4–5% of all tumours. The diversity observed in its histologic presentation classified it into many subtypes among which spindle cell lipoma(scl) is a rare entity. Scl is an uncommon benign tumour of adipose tissue usually located superficially in the neck, back and shoulder region. Although having characteristic histologic features, it poses a diagnostic dilemma.

Case report

A 14 year old male patient presented with a chief complaint of slow growing painless swelling in the left cheek region causing difficulty in speech, chewing for past 4 to 5 months. Radiographic findings revealed well-encapsulated hyper intense masses in parapharyngeal and buccal spaces. The lesion was surgically excised through intra-oral approach and sent for biopsy with a provisional diagnosis of lymphangic hemangioma. After histopathologic and immunohistochemistry evaluation, final diagnosis of pleomorphic variant of scl was made. Rationale of presenting the case is the rarity of lesion in incidence, multiple presentation and age.

Abstract No: 1087
Hamartoma of left submandibular region: a rare case report

Dr. Ashwin V

PGIDS,Rohtak Haryana

Abstract
Introduction

Hamartomas are congenital, mostly benign focal malformation that histopathologically resembles tissue of parental origin with respect to the site of its presence. The most effective treatment is surgery having good prognosis for most of the patients but depends on various factors such as the site, size of the lesion etc.

Case report

A 20 year old female patient, presented with a chief complaint of slow growing painless swelling of left side neck region. On examination, diffuse swelling of left submandibular region in association with multiple non-tender tiny papillo-nodular structures distributed along the lateral border of tongue showing bleeding tendency to touch were present.

Aims& objectives

Surgical excision of pathology and further evaluation histopathologically to arrive at a final diagnosis.

Methods

Patient taken under g.a.(general anaesthesia) using extra-oral approach, ipsilateral eca(external carotid artery) was strangulated with umbilical cord using snuggers to minimise intraoperative blood loss followed by excision of the pathology in toto. Specimen sent for biopsy with a provisional diagnosis of lympho-venous malformation.

Result & findings

On histopathological examination, excised pathology revealed abundant adipose tissue with lympho vascular bundles, salivary gland tissue and collagen fibers.

Conclusion

Final diagnosis of hamartoma was made and patient is under follow up with no signs of recurrence/secondary infection in 6 months follow-up.

Abstract No: 1093**Surgical management of extensive schneiderian papilloma using lefort i osteotomy**

Dr. Samim Ali

PGIDS, Rohtak

Abstract**Introduction**

Schneiderian papillomas are benign tumors that are associated with three key characteristics: tendency to recur, capacity for local destruction, and association with squamous cell carcinoma. They are classified into inverting, fungiform, and oncocytic varieties. The inverting and oncocytic varieties are classically found on the lateral nasal wall with extension into the adjacent sinuses. The fungiform lesion is typically found on the nasal septum. Treatment of these lesions is primarily surgical, with rather aggressive surgery mandated in most cases. There may be a limited role for radiation therapy and close follow-up of these patients is mandatory. These neoplasms arise from a unique area of the respiratory epithelium, termed the schneiderian mucosa. Although these are relatively rare lesions, their association with carcinoma and their tendency to be confused with more common lesions make this topic important for all practitioners.

Case report

A 66 year old male patient presented with polypoidal mass in right nasal cavity since last 4 years. On clinical and radiological examination patient has a polypoidal mass in right nostril Extending into right maxillary sinus,ethmoidal, frontal sinus which was causing nasal blockage and nasal discharge. Surgical excision of mass was done after gaining access by Le Fort I osteotomy under GA. Post operative period was uneventful and relieved nasal blockage and discharge. On follow up patient has no complaint and any sign of recurrence till date.

Abstract No: 1096**Clinicopathological correlation - a peculiar swelling in posterior mandible**

Dr. Sucratha Susie John

Maulana Azad Institute of Dental Sciences

Abstract

A 14-year-old male patient reported to the department of oral and maxillofacial surgery, with pain and swelling on left side of the lower

jaw since 2 months. On extra oral examination, a localized, smooth, hard, non-tender swelling was noted over left mandibular body region. The overlying skin was normal in colour, texture and temperature and no paresthesia was elicited. Left submandibular lymphnode was also palpable, mobile and nontender. Orthopantomogram showed an oval, well-defined radiolucency measuring 2x1 cm, involving the left body of mandible, extending from 34 to 35 with thinning of lower border. Contrast enhanced computed tomography and magnetic resonance imaging of the mandible demonstrated an oval intramedullary lesion, approximately 2x1x2 cm, within the left posterior body of mandible haematological investigations showed a significant increase in eosinophil count.aspiration of lesion with an 18-gauge needle was found to be negative. Histopathologic study (h&e) revealed abnormal langerhans cells in the connective tissue. Immunohistochemical staining for cd1a and s-100 were positive. To evaluate the generalized bony involvement plain radiography of skull, chest and limbs were done and no abnormality was detected. Based on these diagnosis of eosinophilic granuloma (e.g.) of mandible was established. Management: with the patient under general anesthesia, a left segmental madibulectomy was performed, and the surgical specimen was sent for histopathological examination. The resultant defect was reconstructed with a reconstruction plate. Microscopic examination revealed lesional tissue with diffuse dense chronic inflammatory cell infiltrate and cells with reniform nuclei suggestive of abnormal langerhans cells in the connective tissue. Immunohistochemical staining for cd1a and s-100 was performed and was found to be positive. It is thus important to include eosinophilic granuloma in the differential diagnosis of bone lesions in young and adult subjects.

Abstract No: 1117**Intramasseteric spindle cell hemangioendothelioma: a rare case report with review of literature**

Dr. Yogesh Bahadur Singh, Dr. Gaurav Singh, Dr. Madan Mishra, Dr. Amit Gaur

Sardar Patel Post Graduate Institute of Dental and Medical Sciences

Abstract**Introduction**

Spindle cell hemangioendothelioma (sch) was first described in 1986 by Weiss and Enzinger as a vascular neoplasm, characterized by cavernous blood vessels and spindled areas reminiscent of Kaposi's sarcoma. The head and neck region is rarely involved with extremely rare muscular involvement; this being the first case of intra masseteric sch.

Objective

This report attempt to add this rare case to the pre-existing data along with the review of literature.

Materials and methods

A clinically and radiographically misdiagnosed case (fnac, contrast ct, hr usg, angiogram and mri) of intra masseteric vascular malformation reported with a history of gradual enlargement of the swelling over the past two and a half years, which increased in size in reclined position and regressed in erect position and compression. Due to incomplete resolution of the lesion with intralesional sodium tetradecylsulphate, patient underwent surgical excision under general anaesthesia and healing was uneventful.

Discussion

Based on the histopathological report, the final diagnosis was made as,intramasseteric spindle cell hemangioendothelioma. The review of

current literature showed that, to date only seven cases of sch of the head and neck have been reported.

Conclusion

Sth poses a great challenge to the clinician in making a final diagnosis. surgical excision and histopathological examination is the only way to solve such a mystery.

Reference/Bibliography

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Abstract No: 1121

Conservative Management of Ameloblastoma

Dr. Dhanush C V

Vydehi Dental College and Research Institute

Abstract

Aim

To evaluate the treatment outcome of conservative management of ameloblastoma

Materials and Method

A 21 year old male patient reported to department of oral and maxillofacial surgery with chief complaint of swelling in right back tooth region since 8 months, clinical examination revealed a diffuse swelling present in the right inferior border of mandible, oval in shape 4*3 cm in diameter extending posteriorly 1 cm anterior to angle of mandible, anteriorly 1 cm from symphysis menti. Intraorally the swelling was present in the right mandibular buccal vestibule about 4*3 cm in diameter oval in shape extending anteriorly from distal margin of 43 and posteriorly through the edentulous ridge 2 cm ahead of external oblique ridge. The swelling was soft in consistency, mildly tender, attached to the underlying bone, depressible and fluctuant. The patient was diagnosed with ameloblastoma in relation to right mandible and was treated with enucleation, chemical cauterization with carnoy's solution and peripheral osteotomy under G.A.

Results

There were no intraoperative or postoperative complications. His postoperative course was uneventful, with 10 months postoperative follow up no evidence of recurrence was seen.

Conclusion

Enucleation combined with peripheral osteotomy can be considered as a successful treatment option in surgical management of ameloblastoma compared to resection where recurrence rate is minimal.

Abstract No: 1124

“Gorlin-Goltz Syndrome” - A Rare Multiple OKC

Anomaly

Dr. Ashwani Kumar

SGT University

Abstract

Background

Gorlin–Goltz syndrome is an autosomal dominant inherited condition comprising the principle triad of basal cell carcinomas, multiple jaw keratocysts, and skeletal anomalies was reported by jarish and white in

1894. Robert j. Gorlin and Robort W goltz described the distinct syndrome. It is an uncommon hereditary condition caused by mutations in the ptch1 gene causing a idle range of developmental abnormalities.

Objectives

Gorlin-Goltz syndrome in two blood brothers diagnosed via a routine complaint of mild dental pain & swelling, thorough clinical, histopathological & radiographical examination supplemented with appropriate investigation revealed the concerned diagnosis.

Methods

2 brothers with multiple odontogenic keratocyst (gorlin–goltz syndrome) in both maxilla and mandible undergone surgical enucleation of all multiple okc's with chemical cauterization with carnoy's solution.

Result

Primary closure was achieved. No evidence of recurrence was noted after a follow up of 6 months.

Conclusions

Thorough clinical, histopathological and radiological examination supplemented with appropriate investigations reveal the concerned diagnosis as was observed in the case, where in the patient reported with mild dental pain and swelling but thorough evaluation lead to diagnosis of gorlin-goltz syndrome followed by prompt treatment of the patient. So as to reduce the long-term sequele and mortality imposed by gorlin syndrome, early diagnosing and treatment should be the mainstay for patient benefit.

References

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Abstract No: 1141

D Company

Dr. Vibha Vijay Vaswani

Dr. D. Y. Patil Dental College and Hospital, Pimpri, Pune

Abstract

Introduction

Osteomyelitis is an inflammatory disease of the bone that usually begins as an infection of the medullary cavity, rapidly involves the haversian system, and quickly extends to the periosteum of the area. It develops in the jaws after a chronic odontogenic infection or for a variety of other reasons such as trauma, inadequate treatment of fracture, or irradiation to the mandible and for all that, even systemic comorbidities play a major role like diabetes mellitus (d company). Surgical debridement is a definitive method of treating chronic suppurative osteomyelitis of the mandible, with favorable clinical/radiologic results and postoperative function. Stabilization of bone by rigid internal fixation decreases the possibility of pathologic fracture and improves prognosis.

Materials & Methods

A 53 year old female patient who was a known diabetic reported to Dr. D. Y. Patil dental college and hospital with a clinical presentation of non-healing extraction sockets with respect to lower right mandibular region and an extra oral sinus and underwent surgical debridement and stabilization of bone by rigid fixation.

Results

Debridement, decortication and stabilization with a reconstruction plate along the lower border of mandible with bicortical screws using ao principles proved to be successful with the diabetes in control and

there was excellent post-operative results with both extra oral sinus and intraoral alveolus.

Conclusion

Osteomyelitis remains a rare entity in medically fit and well individuals. The clinical features in these patients are not typical of those seen in the traditional debilitated patient. Surgical debridement, decortication and reinforcement to prevent pathologic fracture is a common treatment modality. But, if the comorbidities are not kept in check and control, the same treatment leads to failure. Hence, the patient should be first treated well to keep diabetes in check.

Abstract No: 1146

Surgical Management of Oral Submucous Fibrosis

Dr. Janmesh Manmohan Galvankar

Y.M.T. Dental College

Abstract

Background

Oral submucous fibrosis (osmf) is a potentially malignant disorder of the oral cavity. The surgical management of this condition involves excision of the fibrotic bands and interpositional grafts to retain the increased oral opening. Various procedures and graft material have been utilized with differing success rates.

Objectives

To analyze from world literature the different modalities utilized in the surgical management of osmf.

Method

An analysis of the treatment modalities, the reason for the selection of a particular modality, the organization of the sample selection and the follow-up periods including the proclaimed success rates was done.

Results

The choice of procedure seems to be determined entirely by the preference of the operator.

Conclusions

There exist no definite protocols for the adoption of a particular treatment mode in osmf. Adequate documentation and follow up need to be established to statistically analyze the results and proclaimed successes of various treatment modalities

References

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Abstract No: 1149

Recurrent ameloblastoma in temporal fossa - a case report

Dr. Sowmya Manchala

Vishnu Dental College

Abstract

Ameloblastoma is a unique, histologically benign but aggressive neoplasm of the jaws arising from odontogenic epithelium with

potency to cause extensive destruction of jaw bones and infiltration into the surrounding tissues, it is unusual for odontogenic tumors such as ameloblastoma to occur in the temporal region. Although these odontogenic tumors usually arise in jaws, they can infiltrate into the infra temporal region, pterygomaxillary space or fissure, orbit, anterior cranial base and paranasal sinuses invading soft tissues by way of extension. Here we present a case of recurrent ameloblastoma in the temporal region after 10 years from the site of previous occurrence in the right mandible involving body and ramus for which hemi mandibulectomy was performed. As there is higher incidence of recurrences, there is need for adequate and intensive follow-up not only in the critical period of 5 years of primary surgery but needs a long term follow up. Ref: recurrent ameloblastoma in temporal fossa: a diagnostic dilemma; *vaishampayan, d nair, a patil, p chaturvedi,-contemp clin dent.* 2013 apr-jun; 4(2): 220–222.

Abstract No: 1150

Transoral segmental resection and disarticulation of mandible with immediate reconstruction -'tord'

Dr. Roshan Singh

Babu Banarashi Das College of Dental Sciences

Abstract

Disarticulation resections are required for treatment of variety of pathologies of the jaws. These resections are mostly carried out through extraoral approach, which bear significant postoperative morbidity. The transoral approach may be used for this purpose in benign pathological cases of the mandible to limit the postoperative morbidity of extraoral approach, as it provides sufficient access not only for resection and disarticulation but also for immediate reconstruction. This posters shares our experience with transoral approach for resection and disarticulation in a case of odontogenic kerato cyst and ameloblastoma and reconstruction by reconstruction plate.

Abstract No: 1151

Diagnosis & management of salivary gland disorder

Dr. Gazala Khan

Maharana Pratap College of Dentistry & Research Centre, Gwalior

Abstract

Salivary glands are complex in nature. They could be either tubulo acinar, merocrine or exocrine gland secreting mainly saliva. Salivary gland is one of the main soft tissue structure in maxillofacial area. Saliva is clear, slightly acidic muco serous fluids that coat the teeth, mucosa & thereby help to create & maintain a healthy environment in the oral cavity. Salivary gland may be affected by a number of disease local & systemic & prevalence of salivary gland disease depend upon various etiological factor; there may be bacterial, viral & neoplastic etiologies. The presentation can be acute, chronic or recurrent. Acute suppurative sialadenitis present as a rapid onset pain & swelling & is treated with antibiotic, hydration & sialagogues such as lemon drop, vitamin-c or lozenges. Viral etiologies include mumps & human immunodeficiency virus & treatment is directed at the underlying

disease. Chronic sialadenitis is more likely to be inflammatory than infectious. Inflammation is commonly caused by an obstruction such as stone or duct stricture. Management is directed at relieving the obstruction. Benign & malignant tumours can occur in the salivary gland & usually present as a painless solitary neck mass. Diagnosis is made by imaging (e.g.;sialography, ultrasonography, computed tomography, magnetic resonance imaging) & biopsy (initially fine needle aspiration). This poster is being presented about the various diagnostic procedure & management of various salivary gland disorder.

Abstract No: 1159

Outcome of dental implants in healed odontogenic keratocyst site

Dr. J Stephen Rajkumar, Prof. Dr Vikraman

Ragas Dental College and Hospital

Abstract

Background

Odontogenic keratocyst is benign locally aggressive cyst often associated with the posterior mandible. The aggressive behavior was envisaged and grouped as odontogenic ketocystic tumor for a few years until 2017. As the morbidity involves the associated teeth in the quadrant, fixed prosthetic replacement has always been a challenge.

Aim

To evaluate the post-operative outcome of dental implants placed in the healed odontogenic keratocyst sites.

Methods

The efficacy of the procedure was well analyzed in the literature, and with the available information and with precaution dental implants were placed secondary in the healed okc site after a year.

Results/conclusion

The final outcome of the dental implants placed in the healed okc sites were found to be very stable and are in accordance with the available literature.

Abstract No: 1170

Various modalities for oroantral communication closure

Dr. Vishal S Nair

A J Institute of Dental Sciences

Abstract

Various modalities for oroantral communication closure the practicing oral and maxillofacial surgeon treating patients with oroantral communication or oroantral fistulas should be familiar and competent with various treatment options available. Oac is a communication created between maxillary sinus and oral cavity which if not treated will progress to oaf. The common cause or precipitating factors of an oac includes extraction of posterior maxillary teeth (1st and 2nd molar), implant surgery, cysts and tumors, enucleation, orthognathic surgeries, osteomyelitis, trauma and pathologic entities. Decision on how to treat an oac should be based on size of communication, time of

diagnosis and presence of infection. Furthermore, the selection of treatment strategy is influenced by the amount and condition of tissue available for repair. This e poster discusses about various modalities for closure of oac.

Reference

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Abstract No: 1171

Langerhans Cell Histiocytosis - A Dilemma

Dr. Merlin K Mathai

A B Shetty Memorial Institute of Dental Science

Abstract

Langerhans cell histiocytosis (lch), primarily known as histiocytosis x is an uncommon hematological disorder affecting majorly the infants and children. It is a condition characterized by uncontrolled stimulation and proliferation of normal antigen presenting cells, the langerhans cells. The incidence of lch ranges from two to four cases per one million people in a year, depending upon the age of the population. Generally, the choice of therapeutic regimen is based on disease severity. There is no consensus that exists for the optimal therapy of lch. The treatment of lch especially involving the bones have been reported to be challenging because of the high recurrence rate and the longer follow up period required. In this poster we will be presenting a case of a 5-year-old female patient diagnosed with lch of left mandible and the objective will be to discuss upon the diagnostic dilemma and the various treatment modalities available for the same.

Abstract No: 1180

An unusual case of non healing socket paving way to osteomyelitis - a case report

Dr. Antony Jju Vincent

PMS College of Dental Science and Research

Abstract

Introduction

Osteomyelitis is an infection and inflammation associated with the bone structures: bone marrow, cortical bone, periosteum, blood vessels and nerves. Although it does not have a frequent presentation, it can sometimes lead to complications such as pathological fractures or even septicemia.

Case report

A clinical case of 60 yr old male reported with burning sensation on the left side of cheek for the past 6 months and gives a history of uneventful extraction of 35 two weeks back.

Conclusion

Although osteomyelietis is associated with a prolonged course, requiring a large commitment between patient and clinician as well as sizable health care costs. With the advent of advanced surgical and chemotherapeutic modalities, osteomyelitis still remains difficult to treat and no universally accepted protocol for treatment exists.

Abstract No: 1181
Conservative management of pathological fracture following kcot

Dr. Sona B Meenakshi Devi

PMS College of Dental Science and Research

Abstract

Introduction

Odontogenic keratocyst is one of the most aggressive and recurrent of all the odontogenic lesion and shows characteristics resembling both a cyst and a benign tumor. The lesion traditionally named as odontogenic keratocyst has been renamed by who in 2005 to keratocystic odontogenic tumor (kcot).

Case report

A case of recurrent kcot in a young lady that was managed in our institution is presented.

Discussion

Most (60%) arise from dental lamina rests or from the basal cells of oral epithelium and are thus primordial-origin. The remaining 40% arise from the reduced enamel epithelium of the dental follicle and are thus dentigerous-origin. Clinical identification is of some importance because recurrences are more frequently seen after treatment of the primordial origin type. It is not uncommon and has been reported to account for 3 to 10.5% of all benign jaw lesions. The two most common reasons for recurrence are failure to remove all of the original cyst lining within bone and new primary cyst formations from additional activated rests or oral basal epithelium.

Conclusion

There is no consensus on ideal management of kcot. Some authors advocate conservative management taking into consideration the benign nature of the lesion and the age group affected. Others advocate resection due to the high rate of recurrence.

Abstract No: 1184
Surgical ciliated cyst - a case report with incognito etiology

Dr. Jyothilekshmi, Dr. Nikhil M Kurien

PMS College of Dental Science & Research

Abstract

Background

An iatrogenic cyst which occurs in the maxillary sinus. The most common presenting signs and symptoms being pain, swelling, nasal discharge along with obstruction. Surgical ciliated cyst is a benign cyst of the maxillary sinus that formed after a period of time following surgery or trauma involving the schneiderian membrane. Surgical ciliated cyst of the maxilla or paranasal cyst or respiratory implantation cyst or post operative maxillary cyst was first described by Kubo in 1927 case report a 45 year old man reported to the department of oral and maxillofacial surgery with a chief complaint of swelling on the right side of the cheek since 3 months. The swelling and pain subsided on analgesics. He gives a history of rct 6 years back and extraction of teeth in the same quadrant.

Discussion

This locally aggressive lesion can develop many years after the initial surgery to the maxillary sinus. Mostly asymptomatic but can

progressively cause pain as it expands or in case of infection. Teeth involved by the cyst may become non-vital. Enucleation of the cyst is the treatment plan. In cases of large unilocular cyst with extensive bony perforation, marsupialisation may be performed.

Conclusion

Although surgical ciliated cyst of the maxilla is rarely encountered, surgeons should be aware of such possible complication and able to diagnose at earlier stage of the lesion owing to its locally aggressive nature.

Abstract No: 1186
Cryotherapy for Leukoplakia

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Thai Moogambigai Dental College and Hospital

Abstract

Oral leukoplakia is the most common oral precancerous lesion. The malignant transformation rates of oral leukoplakia lesions have been reported to be 1% to 7% for homogeneous thick leukoplakia, 4% to 15% for granular or verruciform leukoplakia, and 18% to 47% for erythroleukoplakia. The high malignant transformation rates of oral leukoplakia lesions, highlight the importance of early detection and treatment of these lesions. Although oral leukoplakia lesions can be eradicated by surgical excision, laser surgery, cryotherapy is also an effective and alternative treatment modality for oral leukoplakia lesions and for a variety of other oral mucosal lesions. Cryotherapy is a method that locally destroys lesional tissues by freezing in situ. It has several advantages including bloodless treatment, a very low incidence of secondary infections, and a relative lack of scarring and pain. Cryotherapy can be carried out with either a “closed” or an “open” system. We are using open-system cryotherapy with the spray apparatus for treatment of medium and large oral lesions with either smooth or rough surface. Study done in Thai Moogambigai dental college and hospital in the department of oral and maxillofacial surgery is by open system cryotherapy.

Abstract No: TR1762
rare tumours of oral and maxillofacial region

Dr. Mridula Sankaran

Manipal College of Dental Sciences

Abstract

Background

The oral and maxillofacial region is a region of complex structures with diversified origins both mesenchymal and connective tissue. This gives rise to conditions with different etiological factors which include genetics, developmental origin, habits or odontogenic origin. The various rare conditions include synovial cyst of jaw, solitary angiofibroma, langerhans cell histiocytosis and nodular fasciitis.

Aims and objectives

To study rare tumours of the maxillofacial region, their diagnosis and mode of treatment. 4 patients diagnosed with nodular fasciitis, solitary angiofibroma, synovial cyst of jaw and langerhans cell histiocytosis were diagnosed after thorough investigations and surgical management under general anesthesia was carried out. Nodular fasciitis is a rapidly growing lesion of benign fibroblastic tissue, with predilection

to occur in the upper extremities and occurrence in head and neck is rare. Surgically managed by excision under general anesthesia. Solitary angiofibroma-the angiofibromas are a clinically diverse group of entities that share similar histological features. They present as solitary or in some cases multiple firm, usually flesh-colored papules. Langerhans cell histiocytosis-langerhans cell histiocytosis (lch) is a rare disease involving clonal proliferation of langerhans cells, abnormal cells deriving from bone marrow and capable of migrating from skin to lymph nodes. Surgically managed by chemotherapy and radiation. Synovial cyst of the TMJ-synovial cysts are expansile, fluid-filled lesions of the joints mainly located in the periarticular areas of wrists, knees, and feet. they rarely occur in the region of the temporomandibular joint (TMJ), where they most commonly cause preauricular swelling and pain. surgically managed by excision under general anesthesia. Rare tumours of the jaw presents as a challenge to the clinician but advanced investigative and histopathological methods have simplified the diagnosis, and created awareness among the clinicians for the same.

Abstract No: TR6782

Evaluating efficacy of cryotherapy in oral red and white lesions

Dr. Sumayya Umarah

Al Badar Rural Dental College and Hospital

Abstract

Background

Cryotherapy can easily be performed on oral lesions repeatedly with very less patient and operative field preparation. In cryotherapy nothing is excised; rather the lesion is frozen and the resultant necrotic tissue is allowed to slough spontaneously.

Objectives

To evaluate the post operative clinical outcome of oral red and white lesions after the treatment with the cryotherapy, with respect to recurrence of the lesions, wound healing, scar and comparison of changes in histological features.

Materials and methods 15 clinically pathologically diagnosed, oral red and white lesions were selected and nitrous oxide cryoprobe was applied on the lesions for 30–90 s. The ice ball formed was allowed to thaw for 4–5 min and at least 2–3 consecutive freezing and thawing cycles were performed. Follow up was done at 1st 2nd 3rd month, post treatment to compare the histological changes after cryotherapy.

Results

The results showed that lesions of hyperkeratosis and lichen planus showed statistically significant reduction.

Abstract No: TR7297

Aggressive fibrous dysplasia: are bisphosphonates effective?

Dr. Anjali P Nair, Dr. Ravi V. (HOD and Professor), Dr. Shyamsunder (PROFESSOR), Dr. Giri Shankar (Assistant Professor), Dr. Jaeson Maohanan (Assistant Professor)

Amrita School of Dentistry

Abstract

Fibrous dysplasia is a rare, non neoplastic skeletal disease where medullary bone is replaced by fibrous tissue. It happens due to activating

mutation of GNAS gene, leading to overproduction of fibrous tissue in bone causing bone resorption. The commonly used treatment modality for fibrous dysplasia is surgical, which aims at preventing fractures and correcting gross deformities. The primary medical management is using bisphosphonates such as pamidronate, alendronate, risidronate and zolindronate. These drugs regulate mineralisation of bone by inhibiting acid phosphatase secretion hence arresting bone resorption. A 32 year old male patient reported with complaints of severe pain and a rapidly growing swelling on the left side of face. He had already undergone multiple treatments like corticotomy, hyperbaric oxygen therapy and curettage with minimal success. Biopsies from various sites were inconclusive. Cone beam computed tomography (cbct) revealed extensive bony erosion. A slide review was done and diagnosis of fibrous dysplasia was given. It was felt that any further surgical ablation could lead to a pathological fracture or significant weakening of the jaw. So a conservative treatment with bisphosphonates was planned upon. Slow intravenous injection of zoledronic acid (4 mg) was given 2 times at 3 months interval. When reviewed after 6 months his symptoms had subsided. The post op cbct revealed remarkable results with osteolytic regions in the mandible being replaced by sound bone. Bisphosphonates have shown remarkable results in treating fibrous dysplasia and should be used as first line of treatment in cases where surgical intervention is challenging.

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Abstract No: TR8182

Osteoradionecrosis-current trends in management

Dr. Samruddhi Jitendra Borate, Samruddhi Borate

Terna Dental College, Nerul

Abstract

Osteoradionecrosis is defined as bone death secondary to radiotherapy. The severity of the condition and its effect on the patient may vary from cases that are entirely asymptomatic, to those that cause severe pain, disfigurement, functional impairment of the jaws and also affect patient's quality of life. Its definition and classification have changed over years and its pathophysiology has evolved and led to new treatment protocols. This poster includes current trends in the management of osteoradionecrosis of jaws.

Abstract No: 0109

Retropharyngeal abscess management

Dr. Vinu M John, Dr. K Prabhu Sankar

Best Dental Science College

Abstract

Deep neck infections involving the parapharyngeal space and retropharyngeal space are potentially life threatening complications.

Treatment begins with accessing airway, CT. MRI image with IV contrast and broad spectrum antibiotics. In the case of failure of conservative management surgical drainage is required.

Abstract No: 0154

Leukoplakia: The Cauliflower Form

Dr. Raina Basu, Dr. Deepak.C (MDS, FIBOMS)

Sri Ramachandra Medical College and Research Institute

Abstract

Proliferative verrucous leukoplakia is a rare form of oral leukoplakia, which was first described by Hansen et al. in 1985. It is presented as a disease with aggressive biological behaviour due to its high probability of recurrence and a high rate of malignant transformation usually higher than 70%. It is a long term progressive condition which is observed more frequently in elderly women over 60 years at time of diagnosis. Such a case reported to our out-patient department. A 64 years old lady reported to us with a chief complaint of pain and growth on tongue for past 3 years. In history she revealed habit of pan chewing for past 10 years and recently stopped 3 years back. Patient has no other comorbidities or drug allergy. On further clinical evaluation and investigations (incisional biopsy) she was diagnosed with verrucous form of leukoplakia. The patient was surgically managed. This poster describes the diagnosis, management and follow up of the patient.

Abstract No: 0194

Management of recurrent ameloblastoma - a case series

Dr. Prathibha P M, Dr Eapen Thomas

Pushpagiri College of Dental Sciences

Abstract

Management of recurrent ameloblastoma - a case series. Ameloblastoma accounts for 11% of all benign odontogenic tumours in the jaw. Treatment of this odontogenic tumour ranges from conservative to radical and still remains a matter of debate due to their locally aggressive behavior and high rate of recurrence following inadequate treatment. Recurrent cases should be managed by more radical means of resection and restoring form & function. There is a significant correlation between method of treatment and recurrence of this tumor. The therapeutic challenge is to achieve a complete lesion excision with the least possible morbidity. This poster is a case series of management of recurrent ameloblastoma. Surgical resection restoring form and function and minimum morbidity is emphasized.

Abstract No: 0195

Sublingual dermoid cyst: a case report

Dr. Crupa Susan Mathews, Dr. Eapen Thomas

Pushpagiri College of Dental Sciences

Abstract

Sublingual dermoid: a case report. Epidermoid and dermoid cyst from germinal epithelium can occur throughout the body. Intraoral dermoid and epidermoid cyst are rare and account for less than 0.01% of all cysts in the oral cavity. When intra-oral, they can affect the speech, swallowing and breathing pattern as well as aesthetic appearance of the patient. Bulky epidermoid cyst on the floor of mouth are very rare to occur and pose a problem in diagnosis as well as treatment planning to the surgeon. Here we present a case of a 17 year old female with an enormous mass in the floor of mouth, pushing the tongue posteriorly, giving a second tongue like appearance. Imaging assisted the provisional diagnosis of dermoid/epidermoid cyst. An excisional biopsy was performed through an intraoral approach. The biopsy report was consistent with epidermal inclusion cyst.

Abstract No: 0212

Resect and rebuild fish net lesion of the jaw - case report

Dr. Chandooriya. C

Rajas Dental College & Hospital, Tirunelveli

Abstract

Background

Ameloblastoma is one of the most common benign, locally invasive, epithelial odontogenic tumor involving the ramus and molar region in the third to fourth decade of life. Robinson and Martinez in 1977 described unicystic ameloblastoma.

Objectives

To resect locally aggressive lesion of jaw and reconstruct with lowest morbidity.

Methods

In this case report,

A case of ameloblastoma involving the mandibular right back region is presented. A 49 year old male patient reported to our department of oral and maxillofacial surgery with complaint of pain and swelling in the right lower back jaw region for a duration of 1 year.

Findings

Clinically, a large, ill-defined mass present in the lower right back jaw region extending from 33 to 47 which measured approximately 10 x 4 cm. Radiological examination revealed multicystic radiolucency which extends from 33 to 47. Incisional biopsy was done and sent to histopathological examination and report revealed odontogenic epithelium in fibrovascular stroma with peripheral ameloblast like and central stellate reticulum like cells suggestive of plexiform ameloblastoma. Hence surgical resection was planned. With extraoral approach, hemimandibulectomy was performed from left first premolar to right condyle and reconstructed with recon plate. Post operative review done for 6 months with no complications.

Conclusions

For young patients with non-aggressive lesion, more conservative treatment like enucleation with Carnoy's solution, enucleation with

curettage, marsupialisation and curettage with cryotherapy are planned considering the growth phase, aesthetic, functional and psychological effects. For large aggressive lesion radical treatment like marginal resection, segmental resection, hemimandibulectomy are done along with reconstruction to avoid recurrence.

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Abstract No: 0249 Omnipresence of Osteomyelitis

Dr. Amirthaavarshini R, Dr.R.Amirthaa Varshini

Rajah Muthiah Dental College and Hospital, Annamalai University

Abstract

Osteomyelitis is a bony lesion that commonly tends to occur with a cohort of secondary systemic pathologies and in immunocompromised state. It is a unique clinical pathological entity characterised by infection and inflammation of the bone marrow. When a patient is systemically complicated with uncontrolled diabetes, or rare genetic disorder-osteopetrosis caused by defect in development/function of osteoclasts resulting in fragile bones, which are sensitive to fracture and infection, and syndromic conditions, the bones get affected and clinically display as osteomyelitis!! and treatment becomes challenging. Also, mandibular osteomyelitis is a well documented secondary complication of osteopetrosis, but the fact that maxilla being a porous bone with rich collateral blood supply also may get affected and undergo necrosis. This poster is about a series of cases of osteomyelitis secondary to various systemic conditions, who were surgically treated, with clinical, histopathological and radiographical evidence, and adequate review of literature.

Abstract No: 0250 Clearing the Tumour Tangle

Dr. Nithin Sylesh R, Prof.Dr.A.Thangavelu MDS,DNB,FIBOMS

Rajah Muthiah Dental College and Hospital

Abstract

Clear cell changes may be observed in virtually any benign or malignant tumour of epithelial, mesenchymal, melanocytic and hematopoietic derivation not be attributed to variable etiologies. Benign and malignant clear cell neoplasms of the head and neck are rare. They may involve various regions and may be of diverse

derivations, with only 12% of tumors of the salivary glands, jaws and oral mucosa primarily or almost exclusively composed of clear cells. Clear cells are much more frequently encountered in mucoepidermoid carcinoma when compared to acinic cell carcinoma and the existence of pure clear cell variant of acinic cell carcinoma is doubted. Clear cells are found in approximately 6% of acinic cell carcinomas. The diagnosis of accs frequently presents difficulties, owing to its great radiological and cytological similarity with benign tumors and with normal acinar component of the salivary gland, respectively. The differential diagnosis is considered, fundamentally, with clear cell carcinomas, mucoepidermoid carcinomas, warthin's tumor, and oncocytomas. The parotid gland is the site of 83% of acinic cell carcinoma. Only 4% involve the submandibular gland and the balance arise in the intraoral minor salivary glands. Clear cells are found in approximately 6% of accs but in almost 1%, they constitute the major population of tumor cells. This presentation deals with a case report of radiation induced acc of submandibular salivary gland with clear cell changes histopathologically.

References

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Abstract No: 0292 Carnoy's solution: a wonder drug for odontogenic lesions?

Dr. Sikhar Aich, Dr Akshay Shetty

Sri Rajiv Gandhi College of Dental Science

Abstract

Carnoy's solution, a chemical cauterization agent, is indicated as one of the treatment modalities for okc and ameloblastoma. Carnoy's solution was described in 1933 by Cutler and Zollinger as a sclerosing agent in the treatment of cysts and fistulae. Described by voorsmit (1981) contains 100% ethanol, chloroform and glacial acetic acid in a 6:3:1 ratio with added ferric chloride. This chemical composition provides a tissue-fixation property used in histology and a tissue cauterization property utilized in chemical curettage. It is likely that the use of carnoy's solution does contribute towards the favourable result in terms of morbidity and recurrence rate of the lesion. In our institution we used carnoy's solution for treatment of cementossifying fibroma. A pt named sampita das, aged 35 years, was reported to our department with a chief complain of swelling in lower left jaw region since 3 years. Patient underwent surgical excision of the lesion under la back in 2015, following which the swelling reappeared, after which she reported to our department. Treatment done was marginal manibulectomy and chemical cauterization using carnoy's solution.

Abstract No: 0318

Unicystic Ameloblastoma

Dr. Kumari Rathna, Dr. Aksahy Shetty, Dr. Imran

Sri Rajiv Gandhi Collge of Dental Science and Hospital

Abstract

The ameloblastoma is a benign but aggressive neoplasm of odontogenic origin, which may arise from the enamel organ, follicle, periodontal ligament, and lining of an odontogenic (dentigerous) cyst or the marrow of the jaws. They are infamous for their invasive growth and their tendency to recur. Robinson (1937) defined ameloblastoma as a benign tumor that is usually unicentric, non-functional, intermittent in growth, anatomically benign and clinically persistent. They may occur at any age, even though nearly half of the tumors do occur between the ages of 20 and 40 years. This is the most common neoplasm affecting the jaws, yet only accounts for 1% of all tumors of the maxilla and mandible and 11% of all odontogenic tumors. 70% of ameloblastomas develop in the molar-ramus region of the mandible. Radiographically an ameloblastoma can be a unilocular or multilocular radiolucent lesion with a honeycomb or soap bubble appearance. It is characterized by slow growth and local infiltration into the adjacent tissues. Unicystic ameloblastoma is one of the variant of ameloblastoma, with specific histopathological features. It manifests as unilocular or multilocular radiolucencies in the mandible or maxilla. It is less aggressive and has a significantly lower recurrence rate. This report presents a case of unicystic ameloblastoma of maxilla in a 23 yr old female patient which was diagnosed in Sri Rajiv Gandhi college of dental science and hospital. It involved entire left posterior maxilla and lesion extending into the maxillary sinus. Radiographically, it appeared as an expansile radiolucent lesion with thinned and perforated cortices, and is caused root resorption. The lesion was surgically resected.

Abstract No: 0324

Healing of Unicystic Ameloblastoma by Secondary Intention: A Case Report

Dr. Ruma Rani

Buddha Institute of Dental Sciences & Hospital

Abstract

Background

Unicystic ameloblastoma (ua) is a rare, benign, less aggressive, and less invasive variant of ameloblastoma that is observed quite often in younger patients. Radical approaches have effects on the physical and psychological development of a growing young patient; Therefore, conservative approaches are widely used for ua management here.

A case report of a young female is presented with ua of left mandibular-molar-ramus area.

Aims & objectives

To assess the efficacy of conventional enucleation of ua followed by healing with secondary intention under local anaesthesia and to assess and analyze bone healing.

Method

Under local anaesthesia, enucleation and peripheral osteotomy was performed. Involved teeth were extracted. Bismuth iodofarm paraffin paste (bipp) dressing was placed in the cystic cavity and soft tissues were closed to allow healing by secondary intention.

Results

Surgical site healed without complication. The bipp dressing was replaced by a smaller one every week. Excisional biopsy was done and histological analysis of surgical specimen confirmed it to be ua. No recurrence was observed.

Conclusion

Conservative treatments for ua in young patients have more advantages. Our results provide evidence that enucleation and healing with secondary intention is effective in regressing the lesion size. The treatment should be performed as soon as possible after diagnosis, in order to prevent the possible proliferation in adjacent tissues.

Abstract No: 0329

Aneurysmal bone cyst: a rare case report

Dr. Shiwangi Singh

Buddha Institute of Dental Sciences & Hospital

Abstract

Background

Aneurysmal bone cyst (abc) as defined by the World Health Organization is an expansive osteolytic lesion consisting of blood-filled spaces and channels divided by connective tissue septa that can contain osteoid tissue and osteoclast-like giant cells. ABC most commonly occurs in long bones and only 2% occur in the jaws. Available literatures suggest that the mandible is affected more frequently than the maxilla, the proportions varying from 2:1 to 11:9. It is associated with rapid growth pattern, asymmetry of the face, and variable radiographic appearance which makes histopathologic evaluation a very important tool in its precise detection. Its locally aggressive nature and high recurrence rate after curettage make surgical resection a better treatment option.

Aims and objectives

The goal is to restore maximum function, aesthetics and stability. The objective is to assess the efficacy of surgical resection in the treatment of abc and analyze the healing.

Method

Under general anaesthesia, surgical resection was carried out of the involved alveolar portion and the gingival soft tissue growth. Maxillectomy was followed by the placement of split thickness graft.

Result

There was no post-operative complication reported. Surgical site healed uneventfully with complete epithelialisation. Histopathological report confirmed it to be abc. There was no clinical evidence of recurrence.

Conclusion

ABC is a rare entity of the jaws. Primary ABCs of maxilla are rare. Incisional biopsy and aspiration may help in a definitive diagnosis over its confusing clinical and radiological features which are similar to various other pathologic entities of the jaws. Conservative surgical resection is preferable to curettage as the latter is associated with much higher rate of occurrence.

Abstract No: 0331
Sublingual epidermoid cyst in a young girl - a case report

Dr. Shashank Bhushan

Buddha Institute of Dental Science and Hospital

Abstract

Of all the epidermoid cysts encountered throughout the body, only 7% occurs in the head and neck area. Intraorally this benign slow growing and painless entity is usually located in the submandibular, sublingual and submental region. Dermoid and epidermoid cysts in the mouth are uncommon and comprise less than 0.01% of all the oral cysts. Majority of them occur in sublingual region, but there are rare case reports of occurrence in other sites. Roser was the first to designate dermoid cysts in the floor of the mouth as epidermoid tumours. The fundamental difference between the dermoid and the epidermoid is the presence of skin appendages within the wall of the former and the lack of the same in the later. Epidermoid cysts may be categorized as congenital or acquired based on their origin. The origin of epidermoid cysts is believed to be from entrapment of epithelial remnants during midline closure of the bilateral first and second branchial arches. However, some authors have also stated that midline cysts may represent a diverse form of thyroglossal duct cyst. Although floor of the mouth in the midline is most favored site, occasional occurrence involving the buccal mucosa, tongue, lips, uvula, temporomandibular joint dermal graft, intradiploic, intracranial, and intraosseous location within the mandible and maxilla. Symptoms of dysphagia, dyspnoea and dysphonia may occur due to upward displacement of tongue by these sublingual swellings. Further more growth in a inferior direction may give rise to appearance of characteristic double chin. These well encapsulated lesions typically feel dough like on palpation. Treatment comprises total surgical excision. Caution should be taken not to rupture the cyst, as cystic contents may act as irritants to fibrovascular tissues, causing postoperative inflammation. Recurrences are unusual after absolute surgical excision.

Abstract No: 0359
Management of unicystic ameloblastoma (type 3) of mandible

Dr. Murugesh A

Al Ameen Dental College and Hospital

Abstract

Ameloblastoma represents 13–54% of all jaw tumors. It is a locally aggressive benign odontogenic neoplasm of epithelial origin, the source of which may be enamel organ, Hertwig's epithelial root sheath or basal epithelial cells of oral mucosa. Ameloblastoma presents three biologic variants, namely solid/multicystic, unicystic and peripheral. The unicystic variant was described by Robinson and Martinez in 1977. Unicystic ameloblastomas are a rare variant, which usually occur in younger populations. They are characterized by slow growth and being relatively locally aggressive, with the main site of origin being the posterior portion of mandible. It arises as a de novo neoplasm and not following secondary cystic changes in the solid counterpart. Unicystic ameloblastoma radiographically appears similar to dentigerous cyst. However the two can be differentiated following

three dimensional evaluation by ct. Histopathologically, unicystic ameloblastoma is categorized into 3 subtypes with distinct prognostic and therapeutic implications. Here is a case of extensive unicystic ameloblastoma in the mandible of a young male patient, which on conventional radiography appeared to be a dentigerous cyst but on CT and histologic examination turned out to be unicystic ameloblastoma type 3.

References

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Abstract No: 0366
Osteosarcoma

Dr. Luksi Memmi

Regional Dental College, Guwahati

Abstract

Osteosarcoma is a primary malignant tumour of the skeleton characterised by the direct formation of immature bone or osteoid tissue by the tumour cells. The classic osteosarcoma is a rare (0.2% of all malignant tumours) highly malignant tumour, with an estimated incidence of 3 cases/million population/year. Osteosarcoma arises predominantly in the long bones and rarely in the soft tissues. The age at presentation ranges from 10 to 25 years of age. In the head and neck region, osteosarcoma is the most common primary malignant bone tumor, representing 23% of total head and neck malignancies. Osteosarcomas of the jaws are nevertheless rare lesions, representing only 2 to 10% of all osteosarcomas. A female patient, aged 17 years reported to our department with chief complaint of swelling in left middle third of face since 2 years. A 20 mm, localised exophytic growth with mucosal ulceration and irregular margin was seen, extending antero-posteriorly from 35 region to retro-molar trigone area extending posterior to tonsillar pillar and medio-laterally from lgbs to lingual mucosa. Lesion was rubbery hard and mildly tender on palpation. Incisional biopsy was taken and revealed osteosarcoma of left mandible. She was treated with wide excision and hemimandibulectomy and mrnd type II under GA and primary specimen was sent for histopathological evaluation. Histopathological examination reports revealed osteosarcoma of left mandible this e-poster will present a case of osteosarcoma arising from left mandible region along with its management.

Abstract No: 0367
Osteochondroma and Unicystic Ameloblastoma

Dr. Aman Choudhary

Regional Dental College

Abstract

A female patient, aged 29 years reported to our department with chief complaint of slow growing swelling in left mid third of face since 11

years. Incisional biopsy from left maxillary alveolus region revealed osteochondroma. She was treated with enbloc resection i.e. left maxillectomy with orbital floor preservation under GA and primary specimen along with cystic lining was sent for histopathological evaluation. Histopathological examination reports revealed osteochondroma of the primary specimen and unicystic ameloblastoma in the cystic lining. An osteochondroma, when reported in the maxillofacial region, is a benign neoplasm which is known to involve the skull base, maxillary sinus, zygomatic arch, or mandible. Most commonly, the osteochondroma occurs in the coronoid process and the condyle. Unicystic ameloblastoma refers to those cystic lesion that show clinical, radiographic or gross features of a jaw cyst but on histologic examination shows a typical ameloblastomatous epithelium lining the cystic cavity with or without luminal and or mural tumour proliferation. This e-poster will present a unique case of osteochondroma with unicystic ameloblastoma arising from maxillary region along with its management.

Abstract No: 0375

Nonresolving infection in the temporal region: a diagnostic dilemma

Dr. Dibya Falgoon Sarkar

S.C.B. Dental College & Hospital

Abstract

Infections in the temporal region are caused due to varied reasons like odontogenic infections, temporal bone osteomyelitis, mastoiditis and so on. But such serious infections are rare these days due to the advent of modern antibiotics. Here we present an unusual case of a non-resolving infection in a patient who came with a chief complaint of swelling over the right temporal region of scalp along with pus discharge. Case report a 17 years old female patient reported to our institution on 19.01.2018 with a complaint of swelling and pus discharge from the right temporal region of her scalp since 1 month. The patient also gave history of a dull, throbbing pain associated with the swelling. There was also a history of trauma from a pointed object over the same region 14 years back. We performed an incision and drainage on the site of infection. She was given antibiotics and the symptoms subsided. The patient revisited on 03.04.2018 with a similar complaint of swelling and pus discharge from the same region. The patient subsequently underwent a CT scan where we found a well-defined osteolytic lesion in the right temporal bone which extended up to the root of zygoma. We came to a provisional diagnosis of osteomyelitis of temporal bone. The patient underwent a surgery where the osteolytic lesion was exposed and curettage of the bony cavity was done. Histopathologic examination of the surgically removed cavity lining was suggestive of an implanted epidermoid cyst which got secondarily infected.

Abstract No: 0377

Bisphosphonate induced osteonecrosis of jaw

Dr. Bhakti Bhusan Pati

SCB Dental College and Hospital

Abstract

Osteonecrosis of jaw is an important but uncommon side effect of bisphosphonate therapy. Taking oral route rather than IV is extremely uncommon, thought to be dose and time dependant. It may lead to disfiguring complication affecting quality of life. In my poster a 55 years female with a known case of multiple myeloma 8 years back was under oral bisphosphonate for 18 month, presented to my institution with complain of discharge and swelling in left lower jaw since 3 month. There is no definitive treatment effective apart from controlling pain and accompanied infection. Prevention of this complication is therefore important.

Abstract No: 0388

A rare case report on brown tumour

Dr. Janani. N, Dr.Vivek.N MDS (Professor & HOD) Dr.Saravanan.C FDSRCS (Professor) Dr.Karthik.R MDS (Reader)

Kattankulathur Dental College & Hospital

Abstract

Background

Brown tumour is a non-neoplastic bony lesion, caused by increased osteoclastic activity and fibroblastic proliferation, encountered in patients with uncontrolled hyperparathyroidism. The term brown tumour was first coined by jaffe due to the reddish brown colour imparted by the tumour which is caused by abundant deposition of hemorrhage and hemosiderin. The reported prevalence of brown tumour is 0.1% and its incidence in primary hyperparathyroidism is 4.5% and in secondary hyperparathyroidism is 1.5–1.7%. Clinically significant lesions are commonly encountered in the ribs, clavicles, pelvic girdles and extremities. The craniofacial bones are rarely affected and accounts for only 2% of which the mandible is frequently affected than maxilla. The frequency of occurrence is more among persons older than 50 years of age with a male to female ratio of 1:3.

Objectives

The craniofacial involvement is exceptional, here we describe such a rare case and highlight the importance of taking a comprehensive history and focusing the investigations so that appropriate treatment can be given.

Method

A prospective study of a rare case of brown tumour of left maxilla and mandible in a 37 year old woman presented with altered bone metabolism with history of chronic renal failure (crf) associated with secondary hyperparathyroidism reported in our hospital.

Results

Results will be presented.

Conclusions

Conclusions will be presented.

References

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Abstract No: 0390**Necrotising Fasciitis**

Dr. Jitesh Narayan Rai

Career Postgraduate Institute of Dental Sciences and Hospital

Abstract**Background**

Necrotising fasciitis (nf) is a rare, life-threatening condition characterised by rapid progressive necrosis of fascia, muscle and fat. It occurs in all age groups but most patients are below 40 years of age. The most frequent organism implicated is the group A streptococcus.

Aims/Objective

To describe a rare case of nf, complication secondary to submandibular space infection (sms).

Method

A 60-year-old female patient reported to our dept with chief complaints of swelling on the lower right side of the face since 5 days and difficulty in breathing since 1 day. An initial diagnosis of right sms was made. Incision and drainage done in submandibular region followed by extraction i.r.t 46,47. On 7th day sloughing with necrotic area in submental region with dirty yellow necrotic foul smelling fascia was visible. The necrosed skin and fascia were debrided and dressing done. This was done periodically for the next 10 days. Definitive antibiotics were administered. The margins started granulating and the patient condition improved. By the 25th day, wound was freshened and approximated with 3–0 silk.

Result/Finding

The patient was initially diagnosed with sms but necrotic fascia confirmed nf.

Conclusion

Nf is rare in the head and neck region. An oi origin is the most common cause. The key to accurate and prompt diagnosis of nf versus a typical oi lies in the clinician ability to fully appreciate the patient history, presenting condition and accurately progressing disease process. The cornerstone of treatment is surgical debridement. All necrotic tissue must be removed until healthy bleeding tissue is encountered.

Reference

National Journal of Maxillofacial Surgery | vol 1 | issue 2 | jul-dec 2010. 2. Journal of the Scientific Society, vol 41/issue 3/sep.-dec.2014.

Abstract No: 0392**Dentigerous Cyst**

Dr. Siddharth Singhrou

Career Postgraduate Institute of Dental Sciences and Hospital

Abstract**Background**

Dentigerous cysts (dc) are that involve an odontogenic epithelial origin and are due to developmental alterations. They are the most frequent type (10%) after radicular cysts (25%) and are linked to cases of unerupted teeth. The origin of this type of cyst lies in the reduced epithelium, as a result of a cystic degeneration of the remaining enamel organ, generating a fluid accumulation caused by the degeneration of epithelial cells.

Aims/Objective

To describe a dc case associated to a supernumerary tooth.

Method

Prior to surgery, routine blood examination were advised; the results were within normal limits except viral markers which shows hbsag positive. Hence following universal precautions protocols surgical enucleation of the cyst was done under LA. Vestibular incision was given and a full thickness flap was performed from upper right central incisor to the upper right canine. Cystectomy was carried out (with unerupted supernumerary) and the subsequent apicoectomy of teeth 12 was done. finally, the flap was sutured with 3–0 silk. The specimen was sent for histopathological examination(hpe).

Result

An aspiration biopsy of the swelling revealed the presence of clear, straw-colored fluid suggestive of an odontogenic cyst. The hpe showed a thin fibrous cystic wall lined by a 2 to 3 layer thick nonkeratinized stratified squamous epithelium, with islands of odontogenic epithelium, which confirmed the diagnosis of dc.

Conclusion

Based on the explanation and the literature that has been reviewed, we can conclude the following:- 1) the association between a dentigerous cyst and a maxillary supernumerary tooth is unusual. 2) the hpe of the surgically removed piece will determine the confirmed diagnosis.

Reference

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2. (2009) *International Journal of Clinical Pediatric Dentistry* 2(1):42–45.

Abstract No: 0403**A rare case of tumour in maxilla; beyond what meets the eye!**

Dr. Abhipsa Mishra

S. C. B. Dental College & Hospital

Abstract

A 41 year old male presented to our department in with the chief complaint of pain and swelling in right side face since last 1 year. History revealed that the patient was apparently well 1 year back,- when he suddenly developed pain and swelling in right side of face. The pain was sharp type and continuous in nature.the swelling

gradually increased in size, and the patient noticed proptosis of his right eye. Though there were no signs of diplopia, blurring of vision etc. in that eye. On examination the swelling was hard in consistency, size approximately 10 x 4 cm, extending anteroposteriorly from 2 cm before the lateral canthus of right eye till the tragus of right ear. The patient had reduced mouth opening. To begin with what seemed like an ossifying fibroma of maxilla, on further investigation like MRI, gave an impression that it is a invasive chronic fungal granuloma. Whereas, the biopsy reports were suggestive of infected angiofibroma. Therefore, through this poster, I would like to illustrate our experience with this tumour, which had an unusual presentation leading to diagnostic dilemma.

Abstract No: 0407

A case of ameloblastoma treated with conservative approach

Dr. Anoop Kumar Dixit, Dr. Harmurti Singh

Career Post Graduate Institute of Dental Sciences and Hospital, Lucknow

Abstract

Background

Ameloblastoma is an aggressive benign odontogenic tumor of jaw with different clinical feature and histologic patterns. In young growing patient resection of mandible associated with many complication like loss of jaw bone integrity, deformity, dysfunction, cosmetic and psychological distress. An alternative method for young growing patient is conservative approach. Objective- to evaluation of clinical presentation of ameloblastoma and their relation to radiological picture and treatment planning according to patient needbase (conservative).

Method

A case first treated as a dentigerous cyst 4 yr back but recurrence occur, diagnosed clinicoradiological as a ameloblastoma and confirmed by histologically was selected and treated with conservative approach (enucleation and chemical curettage with Carnoy solutions followed by iodoform dressing routinely). Patient was followed for long time on regular interval.

Result

Excellent result was achieved both clinically and radiologically.

Conclusion

In young growing patient where need of cosmetic purpose, conservative approach is good for treatment plan.

Ref -Takahashi K, Miyauchi K, Sato K. Treatment of ameloblastoma in children. *Br J Oral Maxillofac Surg.* 1998;36(6):453–456.

Abstract No: 0425

Back from the Brink

Dr. Preksha Dubey, Dr. G.K. Thapliyal, Dr. Himanshu Bhutani

I.T.S. Dental College and Research Centre

Abstract

Introduction

Chronic suppurative osteomyelitis of the mandible in children is a rare occurrence, considered challenging to treat and often requires

extensive surgery involving resection of the affected part of mandible. However, considering the growth and quality of life of the child, a relatively conservative approach should be undertaken.

Case report

A 13-year-old female presented to the outpatient department with a large swelling over left lower jaw. The patient gave history of surgical removal with respect to 38 about a month back after which the swelling gradually increased in size and developed a sinus tract with draining pus. Patient gave family history of tuberculosis and history of weight loss with reduced appetite since the development of the swelling. Upon clinical examination, the patient had reduced mouth opening and was febrile. Low haemoglobin level and leucocytosis was revealed in the haematology report. Radiological evaluation by orthopantomogram revealed moth eaten appearance of the left side of the mandible (typical of osteomyelitis) with islands of sequestrum. The treatment plan opted was incision and drainage followed by curettage and sequestrectomy followed by decortication under general anaesthesia. The patient showed good recovery post-surgery.

Discussion

Although difficult to treat, a simple and relatively conservative treatment protocol consisting of sequestrectomy and decortication followed by intravenous antimicrobial therapy has shown to arrest the disease and allow complete healing. It is also undertaken to avoid interference with mandibular growth and development in a growing child.

References

1. Merkesteyn J.P.R., Groot R.H., Akker H.P., Bakker D.J., Borgmeijer-Hoelen. Treatment of chronic suppurative osteomyelitis of the mandible. *Int. J. Oral Maxillofac. Surg.* 1997;26:450–54.
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Abstract No: 0430

Dentigerous Cyst-A Rare Occurrence

Dr. Bhaskar Revati Ratankumar

YMT Dental College

Abstract

As oral surgeons, periapical pathologies are often encountered, mostly being cystic lesions. In 1974, Shaefer defined cyst as “ a pathologic cavity filled with liquid, semi-liquid or gaseous contents which may or may not be lined by epithelium”. Dentigerous cyst is a developmental cyst of odontogenic origin. They are due to abnormalities in the reduced enamel epithelium of the tooth forming organ. These cysts involve, impacted, unerupted, supernumerary, primary teeth or even odontomas. 5% of dentigerous cysts arise due to supernumerary teeth. Most commonly these cysts are seen in the mandibular posterior region, most rarely in the anterior maxilla. The treatment ranges from marsupialization to enucleation and curettage. I hereby present a case of a 40 year old male who had reported to our department with dentigerous cyst in the anterior maxilla associated with a supernumerary tooth. The patient was treated by enucleation and curettage and the cavity was packed using gel foam and the supernumerary tooth was extracted. Patient was kept on followup for 1 year and showed a good prognosis with no recurrence and satisfactory healing.

Abstract No: 0439
Oral Submucous Fibrosis-Case Report

Dr. Priyanka Chandrakant Kokane

YMT Dental College

Abstract

Among many functions provided by the oral cavity, entry of food into the esophagus is one of the main function performed by it. Many times due to various diseases and conditions like oral submucous fibrosis there is limitation of mouth opening. Such situations could lead to decrease in the intake of food resulting in lack of nutrition. Oral submucous fibrosis is an insidious chronic disease affecting any part of the oral cavity and sometimes the pharynx. Although occasionally preceded by and/or associated with vesicle formation, it is always associated with juxta-epithelial inflammatory reaction followed by a fibro-elastic changes of lamina propria with epithelial atrophy leading to stiffness of the oral mucosa and causing trismus and inability to eat. The etiology associated with the disease could be because of various factors like areca nut, tobacco, lime or genetic predisposition. Symptoms experienced by the patients include burning sensation, trismus, dysphagia, dryness of the mouth, referred pain in ear, recurrent stomatitis. Signs seen in the patients include blanching of mucosa, reduced size in uvula, vertical fibrous bands, diffuse papillary atrophy of tongue, patient looks anemic. Treating these patients is necessary for restoring the normal form and function. Various treatment modalities are available it could be conservative or surgical.

Abstract No: 0463
Tuberculous osteomyelitis of mandible: a case report

Dr. Nanduri Baba Ganapathi Rao

Drs Sudha & Nageswara Rao Siddhartha Institute of Dental Sciences

Abstract

Abstract tuberculosis can affect any part of the body involving both soft and hard tissues. Tuberculous involvement of craniofacial bones is relatively rare. After affecting the bone it is rare for a mycobacterial infection to get directed towards the skin and present as multiple draining sinuses we report a case of tuberculous osteomyelitis of left body of the mandible with a draining sinus over the face (left body region). This rare incidence is the primary reason that this lesion gets misdiagnosed often. Herein we have reported the diagnosis, treatment, and follow-up of a case, which is a classical presentation of tuberculous osteomyelitis of mandible. One should always have a suspicion of mycobacterial infection in the back of mind when dealing with chronic maxillofacial infections not responding to the usual antibiotic course and local debridement.

Abstract No: 0464
Risk factors and treatment strategies for osteochemonecrosis after jaw reconstruction

Dr. Avijit Bharat

Bapuji Dental College and Hospital

Abstract

Osteochemonecrosis is currently accepted if necrotic jaw bone exposure lasts more than 8 weeks along with a history of anti-resorptive therapy and no irradiation of the area. The material presented is based on available literature and review of articles. The purpose of this poster is to provide perspectives on the risk of developing osteochemonecrosis and to make a guideline on prevention measures and treatment of patients with osteochemonecrosis according to the presenting stage of the disease. Strategies for the treatment of patients with or at risk of bisphosphonate related osteonecrosis of jaw (bronj) were set forth in the American Association of Oral and Maxillofacial Surgeons (AAOMS) position paper on bisphosphonate related osteonecrosis of the jaws and approved by the boards of trustees in September 2006. In the original position paper, bronj risks were categorized as drug-related, local and demographic or systemic factors. The treatment strategies have been determined from published studies. Literature suggests that although bronj is not eliminated, dental evaluations and treatment before initiating IV bisphosphonate therapy among cancer or jaw bone reconstruction cases reduces the bronj risk.

References

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Abstract No: 0480
Tuberculosis of the maxillary sinus - an unusual occurrence

Dr. Neha Umakant Chodankar, Dr. Vikas Dhupar, Dr. Francis Akkara, Dr. Rakshit Khandeparkar

Goa Dental College and Hospital

Abstract

Background: Tuberculosis is a potentially fatal contagious disease that is mainly manifested as an infection of the lungs but can affect

almost every part of the body. It is a chronic granulomatous disease caused by various strains of mycobacterium tuberculosis. Its craniofacial occurrence is uncommon and usually limited to the mandible and rare in the maxilla.

Methods

We hereby report a case of right unilateral tuberculosis of maxillary sinus in a 50 year old male who presented to our unit with the chief complaint of chronic tooth pain following a failed root canal therapy of his upper right bicuspid. A cbct was performed with reports suggestive of a focal enlargement of the sinus lining of the right maxillary sinus. An incisional biopsy was carried out which was reported to be tuberculosis of the sinus lining. Patient was started on anti-tubercular drug therapy together with enucleation of the diseased sinus lining under general anaesthesia. A periodic follow up of over 2 years showed no radiological and clinical evidence of recurrence.

Conclusion

Tb of maxillary sinus is a rare occurrence and truly poses a diagnostic dilemma and should therefore be included in the differential diagnosis of chronic infections that present with enlarged sinus lining. An accurate diagnosis in such cases is paramount for correct institution of therapy and successful resolution of the lesion.

References

1. Kim KY et al (2014) Primary sinonasal tuberculosis confined to unilateral maxillary sinus. *Int J Clin Exp Pathol* 7:815–818
2. Sanahi S et al (2008) tuberculosis of paranasal sinuses. *Ind J Otolaryngol Head Neck Surg* 60:85–87.

Abstract No: 0489

Ossifying fibroma in mandible-a case report

Dr. Sravani Pampana

St. Joseph Dental College

Abstract

Ossifying fibroma (of) is a well demarcated benign neoplasm primarily found in the jaw and composed of fibro cellular tissue and mineralized material. Benign fibro-osseous lesions (fols) are a poorly defined and to some extent controversial group of lesions affecting the jaws and craniofacial bones. These tumours are typically found as solitary lesions in patients lacking relevant medical history or occurrence of similar lesions in the past. The occurrence of multiple or recurrent of in the jaws is considered to be rare and has been associated with hormonal abnormalities, such as hypercalcaemia associated with hyperparathyroidism. Hence, early recognition of symptoms and appropriate therapy is essential. This poster highlights the treatment of ossifying fibroma involving mandible which was managed with excision of the pathologic part followed by reconstruction with recon plate.

Keywords Ossifying fibroma, benign fibro osseous lesions, excision and reconstruction.

Abstract No: 0490

Recurrence of odontogenic keratocyst based on treatment modalities: a review

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JSS Dental College, Mysore

Abstract

Abbreviation used: OKC (odontogenic keratocyst)

Background

okc being one of the most common pathology in the maxillofacial region, has been a great topic of discussion amongst scholars. Its discrete nature and high rate of recurrence has brought about various different treatment modalities.

Aims and Objectives

The aim is to study the recurrence rate of okc in relation to the various treatment modalities.

Objective

Is to understand the preferred treatment modality depending upon the nature and features of each okc.

Materials and Methods

We conducted a search in english literature using the following keywords in pubmed odontogenic keratocyst treatment recurrence.

Results

11 articles were considered from the period of 2010 to 2016 with treatment such as conservative management with curettage, marsupialization, enucleation, chemical cauterization, cryosurgery and aggressive treatment with resection. Every treatment goal is to establish an optimal method that will eliminate possible causes of recurrence. Treatment by means of radical resection proved to be the procedure with the least incidence of recurrence. Most studies still support the need for more conservative options like enucleation and marsupialisation or a two-stage procedure with chemical cauterisation.

Conclusion

With the histological character, pathogenesis and recurrence influencing factors being clearer now, management of okc today should focus on proper diagnosis with inclination towards conservative treatment, use of adjuvants like carnoy's solution, maintaining the critical exposure time near vital structures, cryosurgery when available, minimum follow up for 5 years and repeat surgery if required.

References

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2. Kaczmarzyk T; A systematic review of the recurrence rate for keratocystic odontogenic tumour in relation to treatment modalities. *International Journal of Oral and Maxillofacial Surgery*. 2012 Jun 1;41(6):756–67.

Abstract No: 0493

Ossifying fibroma of jaws-a retrospective study

Dr. Yarlagadda Sai Meghana

Narayana Dental College

Abstract

Ossifying fibroma is a benign, non-odontogenic fibro-osseous neoplasm affecting the jaws, with a diverse range of clinical manifestations and radiological behavior that can range from an asymptomatic solitary lesion to an aggressive, invading tumor.

Aim and Objectives

To evaluate the clinical, radiological features and management methods employed and final outcome of a case series of ossifying fibroma of jaws treated over a 12 year period.

Methods

This is a retrospective clinical case record study involving 25 patients with ossifying fibroma of jaws, who were treated between 2003 and 2015, with a minimum of 3 years follow up.

Results

Out of 25 cases reported, 9 were peripheral ossifying fibromas - treated by excision/alveolectomy and 16 were central ossifying fibromas among which 5 were reported in maxilla and 11 in mandible. Management methods employed included: maxilla: partial maxillectomy, total maxillectomy with orbital floor and reconstruction with a pedicle of coronoid. Mandible: segmental mandibulectomy and reconstruction using reconstruction plates, non-vascular and vascular bone grafts. There was a recurrence reported in one case.

Conclusion

Ossifying fibroma with its varied clinical and radiological features, can mislead a surgeon to perform conservative treatments such as excision, which can cause recurrence. Hence a proper diagnosis and treatment should be carried out, such as an aggressive treatment with 1 cm of clearance margin should be opted for better management and this also reduces the rate of recurrence.

Abstract No: 0502

Myiasis- A Rare Entity

Dr. Mudavath Anand Kumar

MNR Dental College

Abstract

Background

Myiasis is the infestation of tissues, organs of living vertebrate, animals and humans by certain dipterans fly larvae which feed on the host's tissues and body fluids, often causing extensive damage to the host tissues if left untreated.

Methods

A case of myiasis at temporal region in 71 years old female patient managed by manual removal of larvae by topical application of turpentine oil, oral therapy with ivermectin and surgical debridement of wound.

Results/findings

The only antibiotic that is effective against maggots through intravenous or oral use is ivermectin. This case had good results with the dose of ivermectin 6 mg when given orally. In order to prevent and

control secondary infections, systemic administration of I.V. cephalosporin was done.

Conclusion

Myiasis occurs in tropical areas with poor living conditions and insufficient public and personal hygiene. By keeping good surrounding and clean environment we can prevent this rare entity into a zero entity.

Case report; oral myiasis: a case report sikder ma1, pradhan 12, ferdousi f3, parvin mk4.

References

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Abstract No: 0508

Closure of oroantral fistulas: a case series

Dr. Mangal Anil More, Dr.Rinku Kalra (Associate)

Y.M.T. Dental College and Hospital, Kharghar, Navi Mumbai

Abstract

Background/introduction

Oroantral fistula(oaf) is a pathological communication between oral cavity and maxillary sinus, most commonly resulting as an iatrogenic complication during extraction of maxillary molars and premolar teeth due to anatomic projection of their roots within the floor of the maxillary sinus. Other causes include dental infections, maxillary cysts, osteomyelitis, radiation therapy, or trauma. Repairing oafs is a challenging and difficult problem in the field of oral and maxillofacial surgery. Treatment modalities include local or free soft tissue flaps, with or without auto grafts or alloplastic.

Materials/Objectives

The main objective is to select the best approach depending on the situation to achieve complete closure of oaf and avoid recurrence.

Methods

Different approaches were used to treat oaf cases presenting at our dept. Three cases are presented through this poster, showing the usage of buccal advancement flap in 2 cases and combined approach using buccal advancement and palatal rotation flap in one case.

Result

All the three cases healed well, without any recurrence of symptoms.

Conclusion

Treatment modality is planned depending upon the size & location of the defect, feasibility of the flap, time interval between the occurrence of fistula and surgical closure, previous surgical intervention undertaken, presence of pre-existing infection. Also, in cases of failure of primary intervention a combined flap should be preferred to achieve better prognosis in long standing oaf.

References

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Abstract No: 0515**Unicystic ameloblastoma: treatment with conservative approach***Dr. Sanyukta Sanjay Raut**Dr. D.Y.Patil Dental College and Hospital, Pimpri, Pune***Abstract****Background**

The ameloblastoma is thought to be an odontogenic tumor that only occurs in tooth-bearing tissues; it is most commonly found in the mandible and maxilla. Unicystic ameloblastoma is thought to have recurrence potential, but to be less aggressive than the solid or multicystic ameloblastoma, and may respond to enucleation and/or curettage.

Research aim

To determine the outcome with conservative treatment

objectives

To enucleate the pathology followed by peripheral ostectomy and reconstruct it with bone graft, buccal fat pad, platelet rich fibrin and abgel.

Methods

Provisional diagnosis was confirmed with biopsy report of the patient indicating unicystic ameloblastoma. Crevicular incision was made from 34 till anterior border of ramus extraction done with 35. Enucleation was done followed by peripheral ostectomy. Application of Carnoy's solution in the cavity's done and wait of 6 min for tissue fixation was done. Reconstruction was done with bone graft, buccal fat pad, platelet rich fibrin and abgel.

Results

Good healing post operatively, patient is still on followup.

Conclusions

Unicystic ameloblastoma can be treated with a conservative approach but requirement of long term followup period is necessary.

Abstract No: 0520**Osteochondroma of Maxilla***Dr. Ratna Deepika Seshagiri**Dr.D.Y.Patil Dental College and Hospital***Abstract****Background**

Osteochondroma is one of the most common benign tumors of bone, representing approximately 35% to 50% of all benign tumors and 8% to 15% of all primary bone tumors. Osteochondroma is also known as osteocartilagenous exostosis. Osteochondroma is also known as osteocartilagenous exostosis. According to world health organization, osteochondroma is defined as a cartilage-capped bony projection arising on the external surface of bone containing a marrow cavity that is continuous with that of the underlying bone. Osteochondroma of the craniofacial region is rare, with the most common sites of occurrence being the coronoid process of the mandible and the mandibular condyle.

Aims and Objectives

Proper surgical planning to prevent recurrences and any further complications. Good patient outcome.

Methods

Incisional biopsy report was obtained which confirmed osteochondroma. Patient was taken under general anaesthesia. A crevicular

incision with anterior releasing incision was given. Exposure of pathology. Surgical excision of lesion done with clear margins. Flap closure done. Excisional biopsy was sent for histopathological review which confirmed the pathology as osteochondroma.

Findings

Histopathological review confirmed of osteochondroma. Patient called for regular follow ups.

Conclusion

Only few cases of osteochondroma of maxilla have been reported. It is the rarest condition affecting the maxilla. Recurrence of osteochondroma and malignant transformation are extremely rare. Surgical planning is important in these cases to prevent recurrences and any further complications. Patient can be planned in future for bone graft to reconstruct the defect and rehabilitation.

Abstract No: 0542**Juvenile ossifying fibroma of angle of mandible***Dr. S Bindhu Ghorpade**Sri Hasanamba Dental College and Hospital***Abstract**

Juvenile ossifying fibroma (jof) is a benign fibro-osseous lesion, juvenile ossifying fibroma appears at an early age and 79% of the patients are diagnosed before the age of 15, males and females are equally affected. Jof comprises of 2% of oral tumours in children. The jof is located mainly (85%) in facial bones, in some cases (12%) in calvarium and very seldom (3%) extracranially, ninety percent of the lesions located in the face region, involve the sinuses, mainly the maxillary antrum. Mandibular lesions are seen in 10% of the cases, and involvement of angle of mandible is very rare. A 11 yr old male patient presented to our department with complaint of swelling on the right angle of mandible since 2 years. On clinical examination, well defined swelling measuring 1.5x1 cm noted over right angle of mandible. The swelling is bony hard in consistency, non tender, no history of trauma, fna did not yield anything. Orthopantomogram reveals radiolucent unilocular lesion measuring 1.5x1 cm involving right angle region with well defined superior margins and scalloped border inferiorly. Cone beam computed tomography (CBCT) reveals well defined lesion measuring of about 1.13x1.5 cm present in angle of mandible. In this case enucleation and curettage done with peripheral osteotomy. No recurrence with 6 months follow up.

Abstract No: 0545**Sialendoscopy***Dr. Mercy Kamatam**Government Dental College Vijayawada***Abstract**

Recent decades marked by clinical research in head & neck surgery directed towards the concept of organ and function preservation. Morbidity in head and neck diseases has been greatly reduced with acceptance of conservation procedures and open surgical approaches are getting largely replaced with endoscopic ones, wherever possible.

Sialadenitis secondary to obstructive pathologies including sialoliths, strictures and ductal polyps, remains the most common disorder of the salivary gland. Patients would receive sorts of treatment like antibiotics, steroids, sialogogues, anticholinergics or would undergo surgeries like intraoral incision and removal of the sialolith or even gland removal. Also, there were no answers to pathologies like ductal stenosis secondary to chronic inflammation. Introduction of sialendoscope has brought in a paradigm shift in the management of these pathologies. Sialendoscopy is a procedure that is used to examine the ducts (openings) of the salivary glands. The main aim of this e-poster is to describe sialendoscopy as a preferred diagnostic as well as a therapeutic tool for management of salivary gland pathologies that significantly reduce the morbidity, loss of surgical time and hospital stay.

Abstract No: 0551

Ameloblastic transformation of odontogenic keratocyst

Dr. Mayur Vilas Limbhore

Bharati Dental College Pune

Abstract

Background

Odontogenic keratocyst (okc) was first described in 1876 and named by Phillipsen in 1956. It is one most aggressive odontogenic cysts of the oral cavity. It has tendency for rapid growth to invade the adjacent tissues including bone leading to a high recurrence rate (13 to 60%) and is associated with the basal cell nevus syndrome. Okc is derived from either the epithelial remnants of the tooth germ, or the basal cell layer of the surface epithelium.

Aim

To evaluate the outcome of conservative management for odontogenic keratocyst by marsupialization.

Methods

Marsupialization. Findings: decrease in radiolucency seen in relation to the left posterior region of the mandible.

Conclusion

Marsupialization followed by enucleation is a conservative treatment which permits to save adjacent vital structures. This treatment modality is chosen only when a possible recurrence will not endanger a vital structure such as base of skull, brain or eyes and when the recurrence will be easily treated. Use of carnoy's solution slightly reduces the recurrence rate and therefore when possible is recommended especially after marsupialization.

Abstract No: 0572

Odontogenic keratocyst in antrum of highmore - a rare phenomenon

Dr. S.G.Sudarssan

Saveetha Dental College

Abstract

Background

Odontogenic keratocyst (okc) is regarded as a distinct entity due to its typical histopathological features, aggressive nature and high recurrence rate. In 2005 World Health Organization revised and updated

the classification of odontogenic tumours, in which okc was renamed as keratocystic odontogenic tumour (kcot) because of its neoplastic tendency. Prevalence of kcot in maxillary sinus is reported to be only 1% and is regarded as a very rare occurrence. Various surgical management modalities have been advocated for management of kcot such as marsupialization, carnoy's solution, saucerization and enucleation which produced different results.

Case report

A 22 year old male reported to department of oral surgery with infection in the right upper third molar region, which was extracted 1 month before. Intraoral examination revealed fistulous tract and the condition was surgically managed by excision of the fistulous tract lining and curettage of the sinus contents. The intralesional material was subjected to histopathological analysis, which revealed the diagnosis as orthokeratinised okc of maxillary antrum. One year follow up was made with a computed tomography, which revealed remnant oroantral communication and chronic sinusitis, which was further managed by caldwell-luc procedure and antrostomy under general anesthesia and the contents of sinus was sent for further histopathological analysis. Conclusion: kcot has a specific and aggressive course with high recurrence. Kcot encountered in antrum of highmore is rare. Regular follow ups should be performed with clinical and radiographic evaluation. Thus, we report a case of okc of maxillary sinus with recurrent oroantral fistula.

Abstract No: 0575

Management of OSMF with bilateral nasolabial flap as an salvage flap

Dr. Swetha Murali

Saveetha Dental College and Hospital

Abstract

Background

Oral submucous fibrosis is a chronic, complex, and pre-malignant condition of the oral cavity, which is predominantly characterized by an inflammatory reaction in the underlying submucosal tissues. As the disease progresses it clinically presents with limitation in mouth opening, and burning sensation in the oral cavity. Most of the patients diagnosed with this condition are either associated with betel quid or areca nut chewing and other forms of tobacco chewing habit. Versatility of bilateral nasolabial flap which was used as a salvage flap for management of osmf was evaluated for this patient who had a relapse of the same condition 10 years back.

Case report

A 60 yr old female patient reported to oral surgery opd at our hospital, with a chief complaint of difficulty in mouth opening and pain during swallowing for the past 6 months. Patient also gave a history of being operated for the same condition 10 years back, and had a habit of betel quid chewing before the previous surgery and had discontinued the habit since then. On clinical examination evident fibrous bands were palpable; with limited mouth opening of 15 mm. Biopsy was done and histopathological diagnosis of osmf was made. Surgical plan of bilateral fibrotomy and reconstruction with bilateral nasolabial flap was formulated.

Results

Nasolabial flap was chosen as it is closer in proximity to the defect and was found to be satisfactory in this patient, there was adequate mouth opening intraoperatively (forced) of around 40 mm, and on postoperative period day 1, the mmo was around 35 mm and consecutive postoperative days the mmo was around 30–35 mm, and 3 months follow up was done and showed satisfactory results.

Abstract No: 0584

Two third tumor - a case report

Dr. Gupta Disha Devesh

Dr. D Y Patil Dental College Pune Pimpri

Abstract

Introduction

Adenomatoid odontogenic tumor (aot) is an uncommon benign odontogenic lesion that affects young patients associated with an impacted tooth, usually canine. Aot represents 37% of all odontogenic tumors. The histogenesis of aot is still uncertain and sometimes categorized as a hamartomatous lesion. The tumor is sometimes referred as two third's tumor because it occurs in the maxilla in about 2/3 cases, about 2/3 cases in young females, 2/3 case associated with impacted tooth, 2/3 case affected tooth is canine.

Materials and methods

A male patient who reported to Dr. D.y.patil dental college and hospital with a swelling in the maxillary region underwent cyst enucleation and nasal antrostomy.

Results

Enucleation and nasal antrostomy proved to be successful and significant reduction in the size of the swelling on the third postoperative day was noted and no signs of recurrence after follow up was seen.

Conclusion

Even though enucleation and curettage for aot is the most common treatment modality, accurate histological diagnosis is mandatory to avoid unnecessary mutilating surgery. The term adenomatoid odontogenic cyst as suggested by Marx and Stern is controversial. But in this case presented, the presence of unilocular cystic lesion, fluid on aspiration, and cystic cavity on transection has to some extent supported the terminology adenomatoid odontogenic cyst (aoc) as termed by Marx and Stern.

Abstract No: 0585

Fess for single sinus disease, two case reports

Dr. Siddhartha Mishra

Dr. R Ahmed Dental College & Hospital

Abstract

Introduction

Functional endoscopic sinus surgery is one of the recent advancement in maxillofacial surgery. Fess uses nasal endoscopes to enlarge the nasal drainage pathways of the paranasal sinuses to improve sinus ventilation.

Case reports

First case

A young adult male patient presented with facial pain, nasal congestion, altered smell since few months. Clinical symptoms were refractory to medicinal treatment. CT scan was done and revealed chronic sinusitis with thickened maxillary sinus lining. Fess was done under general anaesthesia. Middle meatus antrostomy was done with clearance of the sinus. Second case- another young male patient presented with nasal polyp in left side. CT scan revealed polyp originated from maxillary sinus extending to the nasal airway. Fess was

done under general anaesthesia with middle meatus antrostomy and removal of the antrochoanal polyp with microdebrider. In both the cases nasal pack was given for 48 h. No post operative complications were found. After two weeks nasal endoscopy was done for sinus irrigation and for visualization of the sinus. In both the cases no pathology were found.

Conclusion

Principles of using fess is the widening of the door or natural opening of the maxillary sinus without breaking the wall of the sinus. This results in maintaining the normal sinus drainage pathway without compromising the natural mucociliary movement. Fess has become very popular surgical procedure for single sinus disease replacing the conventional open surgical technique (Caldwell Luc technique).

Reference

1. Fokkens W, Lund V, Mullol J et al (2007) European position paper on rhinosinusitis and nasal polyps. *Rhinol* 45:1–139.

Abstract No: 0592

Pleomorphic Adenoma of Soft Palate

Dr. Pankaj Singhal

Mahatma Gandhi Dental College & Hospital

Abstract

Pleomorphic adenoma is the commonest benign salivary gland tumour, accounting for almost three fourths of all such tumours. Pleomorphic adenoma most commonly occurs in the parotid gland; however it is also encountered in the submandibular, sublingual and minor salivary glands. Almost half of all salivary gland tumours are malignant, pleomorphic adenoma is the commonest benign lesion. A case of pleomorphic adenoma arising de novo in the minor salivary glands is discussed.

Abstract No: 0596

Use of nasolabial flap in oral submucous fibrosis

Dr. Rishabh Giri

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Abstract

Oral submucous fibrosis is a chronic debilitating disease associated with restricted mouth opening and poor oral hygiene. The treatment aims at good release of fibrosis and to provide long term results in terms of mouth opening. Various local grafts have been used to cover the buccal mucosal defects after the fibrotic bands are released in oral submucous fibrosis. Successful use of inferiorly based nasolabial flaps in the management of oral submucous fibrosis is projected.

Abstract No: 0627**Curse of the Larvae or Cavitory Myiasis***Dr. Jacob John**KVG Dental College & Hospital***Abstract****Background**

Oral squamous cell carcinoma if left untreated can lead to many potential complications. Maggots infestation on oral squamous cell carcinoma gets reported rarely. Myiasis is a condition characterized by the presence of fly hatchlings in wounds or body cavities in vertebrate animals which feed on the host's necrotic/or living tissue. Myiasis is seldom seen in patients with debilitating diseases that results in diminished personal hygiene.

Objective

To highlight the ill effects of an untidy lifestyle in patients with squamous cell carcinoma of oral cavity which can result in cavitory myiasis.

Method

A male patient aged about 50 years reported to department of oral and maxillofacial surgery, kvgcd&h, sullia, karnataka with a chief complaint of pain and pus discharge on the right side of the face since 3 days. Finding clinical examination revealed the presence of maggots in an already diagnosed case of squamous cell carcinoma of oral cavity.

Conclusion

There are only few reported cases of myiasis in patients with oral squamous cell carcinoma. Even today, there seems to be no insight present among the patients and their kin regarding maintaining general tidiness and personal hygiene. This poster aims at improving the life of chronically debilitated patients by stressing on the importance of maintenance of general hygiene along with detecting and managing squamous cell carcinomas at an early stage.

Abstract No: 0629**Surgical ciliated cyst - a case report***Dr. Datla Aparna**Gitam Dental College and Hospital***Abstract**

Surgical ciliated cyst, also referred to as postoperative maxillary cysts, paranasal cysts and implantation cysts, typically occur as a delayed complication of surgical procedures involving the nasal or paranasal sinus respiratory mucosa that are aggressive in nature. It was first reported by Kubo in 1927.

A case report of a 21-year-old male patient who reported with a chief complaint of pain in the lower side of face after a history of trauma from a wall collapsing on him 2 days ago. After radiographic investigations the condition was diagnosed to be right mandibular body fracture with comminuted complete alveolar bone fracture of maxilla. All the maxillary teeth were extracted except 18 and 28 and lower border plating was done using 2 miniplates. Postoperative healing was uneventful. The patient was referred to department of prosthodontics for maxillary dental rehabilitation after 6 months where on radiographic examination, a cyst involving the maxillary

sinus provisionally diagnosed as residual cyst was identified in the right body of maxilla. Cystic enucleation was performed under general anesthesia. The cyst was exposed after extraction of 18,28 creating a bony window and mucoperiosteal flap reflection. Viscous greenish yellow cystic content was noted upon aspiration. Enucleation of the cyst was done in total along with the removal of sinus lining. Primary closure was done with 3–0 vicryl sutures. The histopathology report showed that the cystic lining was lined by pseudostratified ciliated columnar epithelium consistent with surgical ciliated epithelium.

References

1. Surgical ciliated cysts may mimic radicular cysts or residual cysts of maxilla. *J.oral maxillofac. Surg* 2012,70; 264–269.
2. Two mandibular surgical ciliated cysts after le fort 1 osteotomy and genioplasty. *British journal of oral and maxillofacial surgery* 2015,53; 1040–1042.

Abstract No: 0633**Sialoceles an unusual presentation and its management***Dr. Sanjit Barman**Dr.R Ahmed Dental College and Hospital***Abstract****Introduction**

Sialoceles arise from extravasation of saliva into glandular tissue secondary to disruption of parotid duct. here sialoceles arise from after sialogram. Its a rare complication managed by placement of rubber drain.

Case report

A patient named santoshi dhibor age,45,female, who given h/o pain and reported to peripheral hospital, where underwent some test, including injection in left cheek as described by patent. She was treated severe allergy under emergency in our institution. Placement of rubber drain response well.

Conclusion

Proper history and allergy test before sialogram should be taken.

Abstract No: 0636**Treatment modalities for oral submucous fibrosis***Dr. Chandana Jyothsna**Sibar Institute of Dental Sciences***Abstract****Aims and Objectives**

The aim of this study is to evaluate the effectiveness of collagen membrane, for the reconstruction of the defect in buccal mucosa, secondary to the resection of the fibrotic bands in oral submucous fibrosis.

Objective

The study is to assess the effectiveness of collagen membrane as an alternative material to cover the buccal defects after surgical release of fibrotic bands in oral submucous fibrosis patients and assessed

using inter incisal mouth opening, haemostasis, pain relief for a follow up period of 3months.

Materials and Methods

The study comprised of 10 clinically proven osmf cases with mouth opening less than 25 mm. Patients were selected in the age group of 15–65 years, both male and female. Patients who were reporting to the Department of Oral and Maxillofacial Surgery and by conducting dental camps taken into the consideration. Preoperatively the local examination included distribution of fibrous bands, sites of involvement. The diagnosis was made on the basis of clinical findings: decreased mouth opening, blanched oral mucosa, palpable fibrous bands, reduced mucosal suppleness, burning sensation in the oral mucosa.

Results

Out of 10 patients the pre operative mouth opening had a mean value of 19.50mm, which on 3-month follow up mean was 31.20mm. The pre-operative pain (fair) N = 5 (50.0%) and (good) N = 5(50.0%) and N total 10 (100.0%) with 3month follow up fair N = 0 (0.00%) and good N = 10 (100.0%) and p value is significant. haemostasis assessed post operatively N = 7 (70.0%) fair, good N = 3(30.0%), total N (%) 10(100.0%). All of them seem to have benefited from the procedure even in the terms of improvement mouth opening, function, and better wound healing.

Abstract No: 0657 The Traumatic Bone Cyst

Dr. Shaan-E-Kareemi Motiwale, Dr. Neelkant M. Warad, Professor, HOD, OMFS, ADCH

Al Ameen Dental College & Hospital

Abstract

The traumatic bone cyst is an uncommon nonepithelial lined cavity of the jaws belonging to the category of 'pseudocyst.' The lesion is mainly diagnosed in young patients most frequently during the second decade of life. The majority of traumatic bone cysts are located in the mandibular body between the canine and the third molar. Clinically, the lesion is asymptomatic in the majority of cases and is often accidentally discovered on routine radiological examination usually as an unilocular radiolucent area with a "scalloping effect". The definite diagnosis of traumatic cyst is invariably achieved at surgery. Since material for histologic examination may be scant or non-existent, it is very often difficult for a definite histologic diagnosis to be achieved. Here we present a well documented radiographically and histopathologically atypical case of traumatic bone cyst involving the ramus of the mandible, in a female patient named sumitra kohli, aged 25 years old with a previous history of trauma to chin, diagnosed & treated successfully in our surgical unit of al ameen dental college & hospital, department of oral & maxillofacial surgery. The case is clinically presented & discussed in relation to its etiopathogenesis, diagnosis, management & prognosis.

Abstract No: 0659

A rare entity of head and neck region (juvenile fibromatosis)

Dr. Sakshi Gupta

Institute of Dental Sciences Bareilly

Abstract

Background

Fibromatosis is a rare benign tumor of fibro-myofibroblastic origin. This non metastasizing tumor has high potential to locally invade and recur after surgical excision. The tumor grow rapidly but has no interference with normal eruption of teeth in oral cavity. The incidence of fibromatosis in head and neck region is 10–12%. Generally it is reported with chief complain of rapid growing fibrous mass with or without pain. It can be confused with myofibroma, neurofibroma, hyaline fibroma etc.

Case report

A 8 year old boy reported with right side lower back teeth region fibrous mass progressively increasing in size. On imaging tumor was found extending lateral border of body of mandible. Patient underwent wide local excision of mass for biopsy which showed features consistent with diagnosis of juvenile fibromatosis. Histologically, on low power, it may be confused with other entities under broad diagnostic category of fibromatosis but under high power it confirmed the diagnosis. Patient was followed up for 6 months with no features of recurrence.

Conclusion

A rare tumor of pediatric age group with high tendency to recur after surgical excision. But surgical resection with tumor free margins prognostically decreases the chances of recurrence.

References

1. Conley J, Healey WV, Stout AP (1966) fibromatosis of the head and neck. *Am j surg* 112(4):609–614 stout ap(1954) juvenile fibromatosis cancer 7(5):953–978.

Abstract No: 0662

Aggressive management of a multicystic ameloblastoma: a case report

Dr. R.Achyuth

Gitam Dental College and Hospital

Abstract

Ameloblastoma is one of the most aggressive odontogenic tumors of oral cavity. Literature has given both conservative and aggressive approaches towards the management of ameloblastoma, where the conservative approach has shown recurrences as compared to the aggressive approach.

Case report

This is a case report on ameloblastoma involving the left lower jaw region in a 35-year-old female following detailed clinical examination, radiographical interpretation and histopathological analysis, an aggressive approach i.e. resection and primary reconstruction with recon plate was done. The excisional biopsy histopathological report was given as follicular ameloblastoma. The patient has been regularly followed up and has not shown any complications till date. We found that going according to the literature and doing an aggressive management yielded less chances of recurrence and good prognosis for the lesion. If it is a solid or multicystic ameloblastoma the aggressive management is advocated.

References

1. Recurrence rates of intraosseous ameloblastomas of the jaws: a systematic review of conservative versus aggressive treatment approaches and meta-analysis of non-randomized studies. *Journal of cranio-maxillo-facial surgery* 43 (2015) 149–157.
2. Mandibular resection and reconstruction in the management of extensive ameloblastoma. *J oral maxillofac surg* 71:528–537, 2013.

Abstract No: 0667**Traumatic pseudolipoma in pediatric population**

Dr. Jency Anna Mathew

A J Institute of Dental Science

Abstract

Owing to the fact that the buccal fat pad in pediatric population is relatively more prominent, the chances of traumatic herniation is remarkably significant. The treatment modalities range from excision to replacement while the diagnosis of which will be a relief to the patient as well as the clinician. Here is a presentation highlighting the prevalence, features and management options for traumatic pseudolipoma or buccal fat pad herniation.

Abstract No: 0686**Osteochondroma of the mandibular condyle: report of two surgical approaches**

Dr. Namratha. Y.

SVS Institute of Dental Sciences

Abstract

Osteochondroma constitutes 35.8% of all benign bone tumors. Osteochondroma occurs commonly in condyle and coronoid process in craniofacial region. Facial asymmetry and accompanying malocclusion are the most common presentations. Clinical appearances include transverse maxillary canting, a prognathic deviation of the chin to the contralateral side, open bite on the ipsilateral side, and a crossbite on the contralateral side. This poster reports an unusual presentation of osteochondroma and its management.

Abstract No: 0687**Rare case of tuberculous osteomyelitis of mandible**

Dr. Pravahitha Paleru, Dr.M.R.Muthusekhar

Saveetha Dental College

Abstract**Background**

Tuberculosis proves to be a major health threat in developing countries. Skeletal tuberculosis comprises only 1–3% of the total population of tuberculosis patients. The sites most commonly involved are dorsal and lumbar vertebrae and epiphysis and diaphysis of long bones. The jaw bones are very rarely affected.

Case report

We present a rare case of chronic tuberculous osteomyelitis of the mandible which was treated conservatively in spite of its extensive involvement. A 57 year old male reported with the chief complaint of pain and swelling in his left side of his face for the past 6 months. Pain was insidious in onset, throbbing in type, radiating to the head, with no aggravating or relieving factors. It was associated with swelling which had been gradually increasing for the past 6 months. Patient gave a medical history of pulmonary tuberculosis for the past 8 months for which he was under anti-tuberculosis therapy. Orthopantomogram revealed diffuse radiolucency involving the entire left mandibular region. Histopathology examination revealed tuberculous osteomyelitis.

Discussion

Even though the incidence of tuberculous osteomyelitis affecting the jaw bones is rare, the frequency of mandible getting affected is higher than the maxilla. Tuberculous osteomyelitis and arthritis generally arise from reactivation of bacilli lodged in bone during bacteremia of primary mycobacterium infection.

Conclusion

Early diagnosis and treatment is necessary for tuberculous osteomyelitis of mandible to prevent serious complications such as tuberculous meningitis which can be life threatening.

Abstract No: 0692**Condylar Hyperplasia**

Dr. Bharat Veer

Institute of Dental Sciences, Bareilly

Abstract**Background and objectives**

Mandibular condylar hyperplasia is a rare disease where excessive growth of mandibular condyle, ramus and body occurs affecting facial symmetry and occlusion and may be associated with pain, temporomandibular joint dysfunction and masticatory problems. Condylar hyperplasia has unknown etiology. Many suggested etiologies are trauma, infection, heredity and abnormal growth factors. It occurs frequently in women than men.

Case report

Here we are presenting two cases of unilateral condylar hyperplasia presented to our department of oral & maxillofacial surgery with chief complaint of facial asymmetry. Patient had no family history and no history of previous trauma or infection in the joint. These cases were

treated with condylectomy and shaving of inferior border of mandible using surgical splint.

Conclusion

Condylectomy is a safe and effective procedure which prevents progression of facial deformity and malocclusion and minimizes psychological impact.

Abstract No: 0700

A rare case of lipoma arising from within the parotid gland

Dr. B. Neeharika

SVS Institute of Dental Sciences

Abstract

Lipomas are the most commonly encountered benign mesenchymal tumors, but their occurrence in the head and neck is rare which constitutes to 13%. At the parotid region they can be found in the vicinity of the parotid capsule, inside the capsule, or within the gland. The incidence of lipoma among parotid gland constitutes around 0.6% to 4.4% with most series reporting an incidence of 1%. This poster will review the literature and report a rare case of lipoma arising from within the left parotid gland. Diagnostic tools employed and their findings along with surgical technique will be demonstrated.

Abstract No: 0702

Osteoid Osteoma

Dr. Parth Gaur

A B Shetty Memorial Institute of Dental Sciences

Abstract

Osteomas are benign, slow-growing osteogenic tumors commonly occurring in the craniofacial bones and are characterized by the proliferation of compact and/or cancellous bone. It can be of a central, peripheral, or extraskelatal type. Osteoid osteoma is the third most common benign neoplasm of bone, occurring predominantly in young, male patients. In most of cases, the patients report inflammatory-like pain that worsens at night and is alleviated with the use of non-steroidal anti-inflammatory drugs. Osteoid osteoma is classically characterized at conventional radiography or computed tomography as a well defined lytic area representing the vascularized central nidus, surrounded by sclerosis and cortical thickening. Computed tomography is an excellent imaging method to identify the central nidus of the tumor and can also be utilized for treatment, as a guidance for percutaneous removal of the nidus. This poster reviews an interesting case and the current trends in the treatment of osteoid osteoma.

Abstract No: 0704

Management of ameloblastomas: aggressive or conservative?

Dr. Harsh K Desai, Dr. Neelam N. Andrade

Nair Hospital Dental College, Mumbai, India

Abstract

Introduction

Ameloblastoma is the most common benign tumour of odontogenic epithelium which is considered aggressive owing to its propensity for loco-regional invasion and risk of recurrence. Occurrence, pattern of presentation, and thereby its treatment varies in paediatric and adult population. Ameloblastomas may undergo malignant transformation, though its occurrence is rare.

Aim

The purpose of this study is to put forward our more than 2 decades of experience and protocol in managing various types of ameloblastomas.

Materials and Methods

This retrospective study was carried out in patients diagnosed for ameloblastoma, at our institution over 20 years. The relevant data was collected based on the patient's clinical, radiographic, histopathological reports and immunohistochemistry.

Results

Ameloblastoma occurred commonly in males (age 12–60 years); commonly in the posterior mandible. Unicystic type was seen predominantly in paediatric population; in the adult population, unicystic, desmoplastic and solid multicystic types were seen. Ameloblastomas were either enucleated with mechanical curettage or appropriately resected. Also, 2 cases were rare malignancies (ameloblastic carcinoma, ameloblastic carcinosarcoma). Only 2 cases showed recurrence in the paediatric patients which were then treated aggressively.

Conclusions

We conclude that for its correct diagnosis, procedures like fnac, core biopsies, biopsies from multiple sites and at different depths should be performed. Unilocular, unicystic ameloblastomas in the paediatric age group can be treated conservatively owing to their growth potential, however, they can be of solid type which needs to be borne in mind, as it alters the treatment modality. Combined solid and unicystic aggressive ameloblastomas must be treated radically. Appropriate reconstruction with microvascular grafts should be adopted in these cases. Emphasis must be given to a long-term regular follow-up.

References

- Muller H., Sloomweg P. The ameloblastoma, the controversial approach to therapy: *J. Max.-Fac. Surg.* 13 (1985) 79–84.

Abstract No: 0706

Managing the Complexities of Osteopetrosis

Dr. Huma Rukhsar Syed, Dr. Snehal N. Ingole, Dr. Dipak Burungale

Nair Hospital Dental College, Mumbai

Abstract

Osteopetrosis is a rare inherited metabolic bone disorder characterized by extensive sclerosis of skeletons, visual and hearing impairment, hepatosplenomegaly and anemia. It has two major clinical forms: the autosomal dominant adult (benign) form is associated

with milder symptoms often appearing in later childhood and adulthood whereas the autosomal recessive infantile (malignant) form has severe presentations appearing in very early childhood, if untreated, is typically fatal during infancy or early childhood. A rare autosomal recessive (intermediate) form is present during childhood with some signs and symptoms of malignant osteopetrosis. Diagnosis is mainly based on clinical and typical generalized increase in bone density. A 8 year old girl having history of osteopetrosis came with complaint of multiple extraoral draining sinuses. She gives history of hydrocephalus in childhood & placement of a ventricular peritoneal shunt. She also gives history of left eye blindness since 1 year of age. She also presented with short stature & low weight. Multiple sinus tracts were seen in submandibular region appropriate investigations & radiographs were performed, enucleation & curettage of sinus tracts were done under g.a. & p/t was kept under regular followups conclusion: osteopetrosis is a rare disease transmitted by autosomal dominant or recessive inheritance having variable penetrance. We report here milder form of disease in the girl child having typical clinical features in the form of anemia, hepatosplenomegaly and vision loss. Diagnosis was confirmed by typical generalized increase in bone density in the patient.

Abstract No: 0724

Ameloblastoma-conservative or radical approach

Dr. Sai Subramanian H, PROF.Dr.Prasad,Assoc Prof.Dr.Arjun Kumar,Asst Prof.Dr.Rohini

Tamilnadu Govt Dental College

Abstract

Background

Ameloblastoma is a benign odontogenic tumour of epithelial origin that exhibits a locally aggressive behavior with a high level of recurrence. It is believed to originate from remnants of dental lamina.

Aim

The aim is to compare two contrasting surgical approaches to ameloblastoma.

Materials and Methods

A case report of two cases of ameloblastoma have been discussed. The method of treatment is conservative approach (enucleation with curettage) in one patient, and radical approach (segmental mandibulectomy) in another patient.

Results

The cases treated by both these approaches were followed up for a period of 3 years and showed no evidence of recurrence.

Conclusion

The treatment of ameloblastoma has always been controversial because of characteristic variations in the disease. There is no fixed treatment protocol for ameloblastoma. The treatment should be individualized based on size of the lesion, proximity to the vital structures, age of the patient, location of the lesion, and the histopathological variant of the lesion.

Abstract No: 0733

A case report of unicystic ameloblastoma

Dr. R.Uma, Dr.B.Sridhar Reddy

Government Dental College and Hospital,Afzalgunj,Hyderabad

Abstract

Unicystic ameloblastomas is a variant of the unicystic or multicystic ameloblastoma. They are characterized by slow growth and being relatively locally aggressive, with the most common site of origin being the posterior region of the mandible. Unicystic ameloblastoma is the demonstration of a single cystic sac lined by odontogenic epithelium often seen only in focal areas. It is one of four subtypes, the others being (1) simple with intraluminal proliferations; (2) simple with both intraluminal and intramural proliferations; and (3) simple with intramural proliferations (4) simple subtype with and without intraluminal proliferations. Radiographically, the unilocular pattern is more common than the multilocular, especially in cases associated with tooth impaction, which usually occur in younger to adult populations. All four subtypes occur in both the 'dentigerous' and 'non-dentigerous' variants. The simple subtype with and without intraluminal proliferations may be treated conservatively (enucleation), whereas subtypes showing intramural growths must be treated radically, i.e. as a solid or multicystic ameloblastoma. Here we are presenting a case report describes a unicystic ameloblastoma occurring in the right side mandible of a 23-year-old male patient.

Reference

- Philipsen HP, Reichart PA (1998) Unicystic ameloblastoma: a review of 193 cases from the literature. 34(5):317–25.

Abstract No: 0734

Cemento ossifying fibroma of mandible: a rare case report

Dr. Patel Hardik Devrajibhai

Government Dental College, Bangalore

Abstract

Cemento-ossifying fibromas are rare fibro-osseous lesions that affect the jaw bones and are included in the group of mesodermal odontogenic tumours. Clinically, it is a large asymptomatic tumor of aggressive appearance. It has been suggested that the origin of these tumour is odontogenic or from periodontal ligament. These lesions commonly seen in women in 3rd and 4th decade of life. Usually in the jaw region the lesions are found mostly in the tooth bearing area. It commonly presents as a progressively growing lesion that can attain an enormous size with resultant deformity if left untreated. We present a case of cemento-ossifying fibroma involving the lower left mandible in a 24 years old female patient who came to department of oral & maxillofacial surgery, Government dental college Bangalore.

Abstract No: 0738**A case report of hybrid ameloblastoma***Dr. Lotavath Jhansi Rani, Dr.B.Sridhar Reddy**Government Dental College and Hospital,Afzalgunj,Hyderabad***Abstract****Abstract**

Ameloblastoma are benign, locally aggressive neoplasm arising from the odontogenic epithelium. There are 6 types of histological variants of ameloblastoma. Most common variant is follicular while desmoplastic type is uncommon variant. Radiologically, the former appears as unilocular or multilocular lucency, while the latter usually appears as radiopaque-radiolucent lesion. When the desmoplastic type coexists with other common variants; it is termed as hybrid ameloblastoma. Here we are presenting a case of 29 years female patient of hybrid ameloblastoma, which was a combination of desmoplastic with follicular and acanthomatous types is being reported

References

Hybrid desmoplastic/follicular ameloblastoma of the mandible: a case report and review of the literature. Masayasu Iwase, et al. African Journal of Medicine and Medical Sciences [01 dec 2011, 40(4):413–415].

Abstract No: 0742**Liquid nitrogen cryotherapy in management of oral lesions***Dr. Adigarla Sudheer, Dr. N V V Satya Bhushan, Dr. Siva Kalyan, Dr. Chiang**Gitam Dental College & Hospital***Abstract**

Potentially malignant disease of the oral mucosa, with the risk of conversion to oral squamous cell carcinoma (oscc) is described as premalignant lesions. The lesions like leukoplakia, erosive lichen planus, retention cysts like mucocele, and hyperplastic growths like traumatic fibroma are predominantly seen intra orally. A prospective study was done on 30 consenting patients to evaluate the effectiveness of open cryosurgical method in treating intra oral lesions with liquid nitrogen. Cotton swabs, 5–10 mm in diameter, were dipped in liquid nitrogen for 1–2 s and applied directly to the lesions after local anesthetic infiltration. Each site was directly exposed to 4 or 5 consecutive freeze–thaw cycles. The patients were examined on the 3rd day, 1st week, 2nd week and 1 month post operatively, to evaluate the parameters like pain, swelling, erythema, sloughing formation of granulation tissue and epithelization. Atraumatic bloodless procedures which could give same or better results than surgical technique was introduced in the recent past. Cryosurgery is one of the modalities which fulfills these criteria. This technique provides a bloodless field, causes less pain.

Abstract No: 0748**Mandibular angioleiomyoma - a rare pathology in oral cavity***Dr. Muneet Kapoor, Dr. Ajaz Ahmed Shah, Dr. Mubashir Younis**Govt. Dental College Srinagar***Abstract****Introduction**

Leiomyomas of the oral cavity are rare due to the lack of smooth muscles within the oral cavity and those of the mandible are extremely exceptional. Oral leiomyomas may arise from the smooth muscle of vessel walls, the circumvallate papilla and atypical arrectores pilorum muscles in the cheeks.

Case report

A 6 year female child reported with complaint of swelling in the left retromolar region. Clinical examination revealed a rubbery mass of 4*2.5 cm in diameter in left mandibular body region on the alveolar crest up to retromolar region with buccal and lingual extensions and having a small ulcer on its surface. No cervical lymphadenopathy was seen. Orthopantomogram showed a radiolucent mass involving the left mandibular body area leaving only a thin rim of bone at the lower border. Inferior alveolar canal was displaced towards the lower border and there was displacement of erupting first molar posteriorly and tooth follicles of premolars anteriorly. Incisional biopsy of the lesion revealed angioleiomyoma. CT angiography was done and it showed that the lesion was highly vascular with facial and lingual arteries as the feeding vessels. The patient was operated under general anesthesia. Transcutaneous ligation of facial artery was done, lingual artery was also ligated and the mass was excised in toto without any significant intra-operative hemorrhage. The defect was left for secondary healing using iodoform dressings. Histopathological examination again confirmed mandibular angioleiomyoma. The defect healed completely within 2 months and complete bone formation was seen after 1 year which was confirmed on orthopantomogram and there was no recurrence of the lesion.

Abstract No: 0752**A variant of chronic recurrent osteomyelitis - a diagnostic dilemma***Dr. Mohsina Hussain**Dr. R Ahmed Dental College and Hospital***Abstract****Introduction**

Osteomyelitis is defined as a progressive inflammation of the bone and its marrow contents. Chronic osteomyelitis of the mandible is still a fairly common disease in developed countries despite the introduction of antibiotics. Etiology is multifactorial such as trauma or surgery or it may be idiopathic. The management is sometimes challenging with long lasting symptoms and unfavourable outcomes despite long term antibiotics and several surgeries.

Case report

A 16 year old girl presented with a chief complaint of recurrent pain, pus discharge and swelling in the left lower jaw since 7 years. History of occasional fever, multiple ulcerative lesions over her back, chest and hip region, and also pain in the hip joint and other lower limb

joints. There is no history of trauma or any record of dental extraction. On examination, the patient presented with short stature, poor built and mental retardation. Scars were present on her chest and back indicating healed areas of ulceration. Intra oral examination revealed exposed necrotic bone and frank pus discharge from the left side of lower jaw. Histopathological examination revealed the lesion to be chronic osteomyelitis whereas her blood picture revealed microcytic hypochromic anemia. There is history of consanguineous marriage between her parents. None of her six siblings suffer from similar kind of affliction.

Conclusion

All the above signs and symptoms put together collaborates with the possible diagnosis of majeed syndrome which is a very rare autosomal recessive disorder characterised by a triad of chronic recurrent multifocal osteomyelitis, congenital dyserythropoetic anemia and less frequently neutrophilic dermatoses. The treatment is usually palliative consisting of NSAIDs, steroids, anti-metabolites, interleukin-1 receptor antagonists and physical therapy. Surgical treatment should be carried out depending on the stage of the lesion- sequestrectomy with or without saucerisation, decortication or resection followed by reconstruction.

Abstract No: 0779

Masson's tumor of buccal mucosa - a rare entity

Dr. Ikbal Hossain

Army Dental Centre (Research & Referral)

Abstract

Introduction

Intravascular papillary endothelial hyperplasia (Masson's tumor) is a rare, benign lesion of the skin and subcutaneous tissue with reactive papillary proliferation of vascular endothelial cells. It was first described by Masson in 1923. Two such cases have been identified, treated and confirmed histopathologically in our department and reported in this presentation.

Case report

A 48 years old lady reported with asymptomatic, pigmented lesion present since last 20 years at right buccal mucosa without any other relevant history. Inspectory findings revealed a bluish red, 2 x 2 cm sized lesion with no secondary changes of overlying mucosa. On palpation, the lesion was nontender, nonpulsating, noncompressible, nonreducible, rubbery in consistency and no blanching on pressure. Auscultation did not reveal any thrill or bruit. Based on the clinical findings, a provisional diagnosis of pigmented lesion of right buccal mucosa was made with differential diagnosis of capillary hemangioma, lipoma and blue nevus. An excisional biopsy of the lesion was carried out under local anesthesia. Histopathological report described the lesion as hemangiomatous growth with intravascular papillomatous endothelial hyperplasia which is evocative of Masson's tumor. Intra operative and post operative dealings were uneventful in both the patients and presently they are under follow up for a period of more than a year without any signs of recurrence.

Conclusion

Intra oral Masson's tumor is very rare and less than a hundred cases have been reported in the literature. Clinically and histopathologically these pigmented lesions may behave deceptively mimicking angiosarcoma. Awareness of this lesion will prevent incorrect interpretation and subsequent management.

Abstract No: 0788

Unusual gingival growth in the anterior maxillary region

Dr. Kandoi Akansha Ashok

Sinhgad Dental College and Hospital

Abstract

Ameloblastoma is a benign epithelial odontogenic tumor. It is often aggressive and destructive, with the capacity to attain great size, erode bone and invade adjacent structures. Unicystic ameloblastoma is a rare odontogenic lesion, with clinical, radiographic and gross features of jaw cysts. The lesion histologically shows typical ameloblastomatous epithelium lining part of the cyst cavity with or without and/or mural tumor growth. Unicystic ameloblastoma usually presents in posterior mandibular ramus region, while it is rare and atypical in anterior maxillary region. In this poster we present a rare case of 24 years old male who presented to us with swelling on right side of face and unusual gingival growth in the right anterior maxillary region which on enucleation and histopathological diagnosis turned out to be plexiform unicystic ameloblastoma. This particular lesion was enucleated carefully and exhibited no islands of ameloblastoma in the wall of the cyst.

Abstract No: 0797

Neurofibromatosis - A Case Report

Dr. Mohd Asjad Raza

Institute of Dental Sciences

Abstract

Neurofibromatosis type 1 (NF1) is used for a group of genetic disorders that primarily affect the cell growth of neural tissues. NF1 is an autosomal dominant, multisystem disorder affecting approximately 1 in 3500 people. NF1 also known as Von Recklinghausen's disease, is the most common type of NF1, and accounts for about 90% of all cases. Patients have a high predisposition to develop both benign and malignant tumours. The expressivity of NF1 is extremely variable, with manifestations ranging from mild lesions to several complications and functional impairment. Oral manifestations can be found in almost 72% of the NF1 patients. A 17 year young patient came to our department with the chief complaint of painless swelling over right lateral nose and left temporal region along with multiple nodules. Orthopantomogram (OPG) was non-remarkable, whereas, Magnetic resonance imaging (MRI) confirmed the presence of soft tissue mass in the right lateral region of nose and left temporal region. Treatment was planned to surgically excise the lesion in-toto followed by primary closure. MRI played an important role in establishing the diagnosis of rare case of neurofibromatosis apart from the clinical evaluations and the treatment resulted in good prognosis with no further signs of recurrence on follow-ups. The aim of this study is to report the case of NF1 & to describe the role of a maxillofacial surgeon in providing esthetic & functional treatment to the patient.

References

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Abstract No: 0798
Schwannoma - A Case Report

Dr. Arun Krishnan.S

Sree Balaji Dental College and Hospital

Abstract

Schwannoma is a benign tumor that originates from the presence of schwann cells of the peripheral nerves. They are usually asymptomatic, do not recur, and malignant transformation is rare. The diagnosis can only be made during surgery and by histological study. Schwannoma is usually found in the head and neck, and rarely in the oral cavity. When it does occur in this area, it is more likely to be found in the tongue. Other locations in the oral cavity include: the floor of the mouth, palate, gingiva, vestibular mucosa, lips and mental nerve area. This poster is a clinical case of schwannoma in a 45-year-old male patient with persistent swelling on the palate, present for 3 months. The mass was firm and relatively mobile. Computed tomography was taken which revealed a homogeneous mass, slightly less dense, with well-defined borders, and without infiltrating the surrounding tissues, which were normal. Slight underlying bone resorption was observed due to pressure. There has been no sign of recurrence 2 years after surgery. The definitive preoperative diagnosis could only be carried out with a biopsy and pathologic study. The treatment consists of surgical excision.

Abstract No: 0815
“Spindle cell tumour” of the oral cavity - a case report

Dr. Deepika C

Indira Gandhi Institute of Dental Sciences, Pondicherry

Abstract

Introduction

Spindle cell tumours are highly diverse and account for only 1% of the tumours of the oral cavity. Despite their rarity, proper diagnosis and treatment to prevent further recurrence is of paramount importance. The following is a case report and review of a similar incidence of spindle cell tumour at our institution.

Case description

A 51 year old male patient reported to the department of omfs at igids, pondicherry, with a chief complaint of pain and swelling on the left side of face. On examination a solitary diffuse swelling of size 7*1 cm was found near the left cheek region, soft to firm in consistency, associated with mild tenderness. Intra oral examination showed obliteration of left maxillary buccal vestibule from 23 to 27 region. Incisional biopsy of the lesion suggested a benign spindle cell tumor. Under general anesthesia, weber fergussons incision was placed and layer by layer dissection was done. Tumour was noted in the region proximal to the zygomatic buttress extending till the infratemporal region, which was excised and the defect area was covered by buccal fat pad. Layer wise closure was done and sutured using 3-0 vicryl and

skin closure was done using 5-0 prolene. Subsequent reviews since surgery have shown no evidence of recurrence.

Discussion

The histopathological report of the excised specimen was suggestive of schwannoma. Literature review of similar cases are extremely rare contributing to 24–25% in the head and neck and an uncommon 1% of incidence in the oral cavity. The rationale of presenting this poster is to cite one such rare incidence of a benign spindle cell tumor, and the importance of accurate histopathological examination in such cases for an appropriate diagnosis, treatment plan and good prognosis.

Reference

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Abstract No: 0824
Multiple peripheral osteoma of face (a component of gardner’s syndrome)

Dr. O M Vachaspati

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Abstract

Osteomas are referred to as benign neoplasm, but they are actually hamartomas that occur almost exclusively in membranous bone. They may arise from proliferation of cancellous(trabeculae), compact bone(dense lamellae) or can be composed by a combination of both. Osteomas have been classified into three different types - central,peripheral and extra skeletal. The case presented here is a multiple peripheral osteomas of maxillofacial region which had no correlation with Gardner’s syndrome. Surgical excision of osteomas on right angle and left body was done through submandibular incision on each side and osteomas on left infraorbital rim was excised through infraorbital incision. The pathogenesis of osteoma is still unknown. It is debatable whether it is true neoplasia or hamartoma. Various causes enumerated in literature for occurrence of osteoma are: trauma, reactional mechanism, infection and developmental. according to Thoma and Goldman, trauma is the cause after which growth starts spontaneously. As osteomas are usually found near muscle insertion area, it is suggested that chronic muscle pull leads to growth of lesion which may be associated with previous trauma. This growth occurs in response to subperiosteal hematoma accompanied with muscle pull.

Abstract No: 0848
Mucous extravasation cyst – following iatrogenic injury – a case report

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CSI College of Dental Sciences and Research, Madurai, Tamilnadu

Abstract

Introduction

Mucous extravasation cyst in relation to sublingual salivary gland usually will present in the floor of mouth can develop as a result of rupture or damage to duct of sublingual gland.

Case report

28 year old male reported to our department with a bluish clear dome shaped swelling measures about 2 x 1.5 cm following an iatrogenic injury in the floor of mouth during tooth preparation for fixed prosthesis. Swelling developed 1 month following injury associated with discomfort and intermittent pain which aggravated during mastication and subsided by itself. On aspiration it gave viscous clear fluid suggesting saliva and following radiographic examination, a provisional diagnosis of mucocele was made. Surgical excision of the cyst done under general anesthesia by intraoral approach.

Result

Healing was satisfactory with no signs of recurrence on a postoperative follow up for 6 months. Post operative histopathological examination of specimen revealed a mucous retention cyst containing mucous laden macrophages along with dilated salivary gland ducts with chronic inflammatory cells seen in the connective tissue.

Conclusion

Excision of cyst along with the removal of the salivary gland is a definitive treatment option and has less recurrence rate.

Abstract No: 0850**Peripheral osteoid osteoma of ramus of the mandible**

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Dr. Senthilmoorthy, MDS, Dr. Catherine MDS*

CSI College of Dental Science and Research, Madurai

Abstract**Introduction**

Osteoid osteoma is a benign lesion of osteoblastic derivation. It can be central, peripheral, or extra skeletal type. Most frequently observed in 2nd and 3rd decades of life.

Case report

A 13 year old female reported to our institute with complaint of pain and swelling in the left side of the face which increased gradually in size since 3 months. On extra oral examination, a solitary swelling spherical in shape of size 3*3 cm, bony hard in consistency, tender on palpation, immobile, extending superiorly up to left zygomatic arch, inferiorly to 1 cm above the left lower border of mandible, anteriorly 1 cm away from ala of nose and posteriorly 1 cm away from away from left anterior border of mandible, with restricted mouth opening. On intra oral examination there was a blanching of tissue in left buccal mucosa along the anterior border of ramus region. On the basis of clinical findings a provisional diagnosis of benign osseous lesion was made and a differential diagnosis of ossifying fibroma and osteoblastoma was made. Orthopantomograph revealed a well defined radio opaque mass on left side of anterior border of mandible. Computed tomography (CT) showed a well defined radio opaque mass on left anterior border of ramus below the coronoid process of size 1.4*1.5 cm.

Management

Under General Anesthesia (GA) osteotomy was done along with anterior border of the ramus till sigmoid notch and bony mass was removed along with left coronoid process. Histopathological examination revealed irregular bony trabeculae lined up with plump osteoblasts, suggestive of osteoid osteoma.

Conclusion

Osteoid osteoma most frequently occurs in long bones. Its occurrence in ramus of the mandible is a rare entity. Good clinical knowledge and proper radiographic investigation are essential for correct diagnosis of these lesions.

Abstract No: 0852**Roids in teenage central giantcell granuloma - a case report**

Dr. Jenin.N.T

Rajas Dental College and Hospital

Abstract

Central giant cell granuloma (CGCG) is a benign intraosseous lesion, occurring more commonly in children and young adults. Females are affected more than males and mandible is more commonly affected than maxilla. Based on clinical and radiological features, it is categorized into aggressive and non aggressive variants. Aggressive variant has high recurrence potential comparing to the non aggressive variant. The common treatment for aggressive CGCG is surgical resection, which cause increased morbidity to the patients. Studies have shown that curettage with additional steroid therapy minimizes the recurrence potential of aggressive CGCG, thereby eliminates the need of aggressive surgical resection. This is a case report of 10 year old female patient, with the chief complaint of swelling in the right lower jaw for the past 15 days. By incisional biopsy it was diagnosed as aggressive variant of CGCG in the right posterior mandible. Owing to the age we did surgical curettage of the lesion with additional steroid pack. Patient has recovered from surgical procedure easily and able to do her regular activities, and has been followed up for past 4 months with Cone beam computed tomography (CBCT) with no signs of recurrence. The patient is still under follow up.

Reference

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Abstract No: 0853**Osteomyelitis - an overview of current treatment modalities**

Dr. Apurva Vivek Vaidya

Terna Dental College

Abstract

Osteomyelitis is inflammatory process of bone and bone marrow caused by an infectious organisms which results in local bone destruction, necrosis and apposition of new bone. A better understanding of pathophysiology of osteomyelitis is a key factor for development of better therapeutic strategies for this devastating disease.

Abstract No: 0854
Odontogenic Keratocyst- An Insidious Entity

Dr. Divya Ratnakar Kamath

Terna Dental College and Hospital, Nerul, Navi Mumbai

Abstract

Odontogenic keratocyst (OKC) is characterized by a uni- or polycystic intraosseous lesion of odontogenic origin with typical lining of parakeratinized squamous epithelium. Clinically, it presents as a benign but locally aggressive lesion with predilection for the posterior region of mandible. Herein, we report 2 cases of long standing odontogenic keratocyst extending into the ramus without any pathognomonic signs and symptoms related to it. They were diagnosed radiographically followed by incisional biopsy that confirmed the diagnosis. They were then treated by enucleation and chemical cauterization and are now kept under observation.

Abstract No: 0867
A case of unilateral large okc managed conservatively: an experience to share

Dr. Aparna Ray

I.T.S C.D.S.R Muradnagar

Abstract

Introduction

It's a well known fact that odontogenic cyst and tumors are common findings in oral and maxillofacial region. There are many conditions affecting the jaws that present with a cystic, radiographic appearance. Odontogenic keratocyst (OKC) often presents as a large unilocular radiolucency in young individuals, typically at the posterior mandible and these cystic changes are most commonly seen in relation to unerupted mandibular third molars.

Case details

Here in we will be discussing a case of one large OKC (Keratocystic odontogenic tumour (KCOT)) in right posterior mandibular region associated with impacted right mandibular third molar, extending anteriorly from mesial root of mandibular right second molar till the posterior border of mandibular ramus posteriorly and superiorly from sigmoid notch till mandibular angle inferiorly, which was enucleated along with the removal of impacted third molar. The residual cavity was then chemically cauterized using modified carnoy's solution and was packed with bipp (bismuth iodoform and paraffin paste) with a follow up period of 8 months during which the bipp dressings were changed at an interval of 2 weeks regularly.

Conclusion

We have found that with the long term follow up and use of bipp we could save the patient of a supra-major surgery including resection of mandible and free fibular flap. This method of conservative management using bipp can be used in benign lesions, cystic lesions etc. And not in case of malignancies where an aggressive approach remains the treatment of choice. Key words: okc- odontogenic keratocyst, bipp- bismuth iodoform paraffin paste.

Abstract No: 0876
Okc - A Case Report

Dr. Vaanmugil, Prof Dr Jimson S, Dr Parthiban J & Dr Lokesh B

Tagore Dental College, Chennai

Abstract

Odontogenic keratocyst - a case report introduction odontogenic keratocyst (OKC) was first described by philpsen in 1956. Later in 2005 World health organization (WHO) considered okc to be a tumor and recommended the term keratocystic odontogenic tumor separating the lesion from orthokeratinising variant which is now considered as odontogenic cyst. OKC's occur more common in 2nd and 3rd decade of life and show a slight predilection to males. OKC comprises approximately 11% of cysts of the jaws. It is an aggressive tumor with medullary spread. These cysts have a high recurrence rate ranging from 3 to 60%.

Case report

A 34-year-old male patient reported with a history of intermittent pain for 2 years in the right lower back tooth region with pus discharge. Clinical examination revealed a swelling in the right lower posterior region of the face. OPG revealed a well-defined multilocular radiolucency involving the right lower mandible extending up to the head of the condyle. CT scan revealed expansile lytic lesion with soft tissue involvement from parasymphiseal region to the coronoid process. Thinning of cortex was seen. Impression of ct suggested a diagnosis of ameloblastoma. According to histopathological report, a diagnosis of okc was made based on the features of cystic lining with palisading of basal cells with uniform thickness of 4–6 layer of cells. Hemi mandiblectomy was done and reconstruction with free fibula graft was harvested from the right leg.

Conclusion

OKC is debated regarding the origin and treatment modalities. Post operative follow up for at least 6 years is essential to prevent recurrences. Despite of many classifications and nomenclatures clinicians still have to face difficulties in the management of this lesion.

Abstract No: 0877
Inverted Ductal Papilloma

Dr. Arun Prakash, Dr. Jimson S, Dr. Lokesh B, Dr. Anandh B

Tagore Dental College, Chennai

Abstract

Inverted ductal papilloma - a case report inverted ductal papilloma is a rare benign neoplasm of papillary appearance which originates from the secretory ducts of the salivary gland. According to some authors, the etiology could be Human papilloma virus (HPV) virus. It normally shows exo-phytic growth. However, some reports had been proven to be endo-phytic or inverted growth. The most common sites being located in the nasal and paranasal sinus mucosa, in the bladder and lacrimal glands.

Case report

A 55 years old male patient visited our center with a chief complaint of obstruction in the nose. Clinical examination revealed extra swelling over the left nasal cavity. Cone beam computed tomography (CBCT) of paranasal sinuses revealed polypoidal soft tissue mass of size 10.2x 5.8x 5.0 cm located in the left nasal cavity extending into the left ethmoid and maxillary sinuses. Incisional biopsy was done, and the histopathological diagnosis was inverted papilloma. Hemi maxillectomy was done along with the removal of tumour. Mid-thigh

split skin graft was harvested and placed over the raw wound area. Surgical obturator was placed which was fabricated preoperatively through a mock surgery. Since the lesion was destructive and invasive in nature, a complete excision of the tumour was the fundamental choice of surgical procedure.

Abstract No: 0885

Myositis Ossificans: A Case Report

Dr. Rohit, prof Dr. B Sarvanan, Prof. Dr. J. Balaji, Assoc. Prof. Dr. Arun Kumar, Asst. Prof. Dr. T. Rohini

Tamil Nadu Govt. Dental College and Hospital

Abstract

Background

Myositis ossificans is described as bone formation at an abnormal site, usually in soft tissue also labelled as heterotopic ossification. It is classified based on etiology as progressive for an unknown cause and traumatic due to injury to soft tissues or muscles. Myositis ossificans may affect interstitial tissues of muscles as well tendons, ligaments, fascia, aponeurosis and even the skin. As most cases are reported in muscles of limbs, masticatory muscle involvement in myositis ossificans is rare.

Aim and objective

The purpose of presenting this case is to stress the importance of correlating the patient history with clinical findings before arriving at a diagnosis and treatment plan from a surgeon's point of view.

Methods and materials

A patient reported with chief complaint of nil mouth opening. Examination revealed a non-tender, hard & diffuse swelling on his left cheek, with history of trauma 1 year back. Further investigations with Orthopantomogram (OPG) and Computed Tomography (CT) scan revealed egg-shell calcification in the left masseter muscle suggestive of myositis ossificans. The treatment plan opted was excision of calcified mass under general anesthesia.

Results

After excision, 35 mm mouth opening was achieved immediately after the procedure.

Conclusion

The outcome of the surgical plan was successful perhaps due to expression of the disease, proper diagnosis and correct surgical approach.

References

k.h.thoma, *oralsurgery, mosby, st. louis, mo* (1958), p1568 -d.kim, s.lazow, g.har-el, j.berger myositis ossificans traumatic of masticatory musculature: a case report and literature review.

Abstract No: 0888

Angiolipoma of the buccal pad of fat: a case report

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Department of Oral and Maxillofacial Surgery, Tamil Nadu Government Dental College and Hospital, Chennai

Abstract

Introduction

Lipomas are benign soft tissue neoplasm of mature adipose tissue. They are seen at all ages, commonly found in patients of age 40–60 years with more male predilection. Although lipomas are most

common tumors of mesenchymal origin it's rare in maxillofacial regions. Angiolipoma is rare type of lipoma composed of fat and blood vessels constituting 5–7% of lipomas, occurring most commonly on the trunk and extremities of young adults. Its etiology is unclear aims and objective aim is to stress the need for a clinician to diagnose intra oral lipomas using latest diagnostic methods considering it as a differential diagnosis and conservatively treat them without causing much discomfort case report a 36 year old lady reported with chief complaint of swelling on her left cheek region for past 1 year extra oral examination revealed a diffuse swelling, mobile, firm and slightly tender on palpation in left cheek region measuring 5*5 cm intraorally a yellowish oval swelling was seen obliterating buccal vestibule in relation to 25, 26, 27, 28 region few engorged blood vessels were noted fnac revealed presence of adipocytes mri revealed well defined t2 hyper intense lesion in left cheek anterior to left masseter and left ramus of mandible, extending medially into retro-molar trigone and laterally into deep subcutaneous plane case was planned for and treated by surgical excision conclusion there are two types of angiolipoma - infiltrating and non-infiltrating the non-infiltrating type is encapsulated. Simple excision is curative and there is no tendency for recurrence the infiltrating type can create some difficulty in excision and the recurrence rate is high. there is some controversy about infiltrating type. Some believe it could present diffuse angiomatosis associated with fat rather than neoplasm.

Abstract No: 0891

Intractable stone bone -a rare case report

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Tamil Nadu Government Dental College and Hospital

Abstract

Background

Osteopetrosis “marble bone disease” “Alber's-Schonberg disease” a rare hereditary metabolic bone disorder with generalized ‘skeletal disorder’ due to the defect in bone resorption and remodeling, marrow space encroachment results in haematopoietic insufficiency. Three clinical distinct forms infantile, intermediate and adult based on age and clinical features. Hallmarks were prominent sclerosis, “bone within bone” appearance of spine, “sandwich vertebra”, “Erlenmeyer flask deformity type-2” of distal femur radio graphically.

Aim & Objective

This poster elaborates a rare case report of 8 years old female child who suffers from recurrent osteomyelitis of mandible, secondary to mild form of infantile malignant osteopetrosis.

Method

A rare case report with classic clinical and radiographic signs of osteopetrosis has been reported with comprehensive literature review.

Results

Osteomyelitis is difficult to resolve in subjects suffering from osteopetrosis, it is necessary to be cautious in doing treatment for these patients.

Conclusion

Infantile forms of osteopetrosis associated with diminished life expectancy, early diagnosis based on clinical and radiographic features become crucial. Haematopoietic stem cell transplantation and “recombinant renkl” administration are beneficial.

References

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Abstract No: 0896

Bone fever: maxilla not an exception

Dr. Aiman Fathima

SVS Institute of Dental Sciences

Abstract

Osteomyelitis- historically known as 'bone fever' is a disease which is heterogeneous in its pathophysiology, clinical presentation and management. Progressive bony destruction and the formation of sequestrum are hallmarks of the disease. Porous, cancellous maxilla with its rich vascularity makes it more resistant to osteomyelitis as compared to mandible. Moreover, with the advent of newer generation of antibiotics, osteomyelitis of maxilla is today fairly uncommon. The two predominant causes of maxillary osteomyelitis are odontogenic infections and sinusitis with few other local and host systemic factors. The goal of treatment in case of osteomyelitis is to subdue the infection, remove infected necrosed bone and diligent follow-up of the patient to avoid/detect any signs of recurrence. Optimal glycaemic control in diabetics is the essence to control spread of infection and avoid recurrence. This poster reports a series of patients diagnosed with maxillary osteomyelitis and treated in our unit from 2013 to 2018. Demographic data, clinical presentation and management strategies will be discussed.

Abstract No: 0908

Minimally invasive treatment of oral ranula with mucosal tunnel technique

Dr. Kodi Shravan Teja, M.SureshKumar(HOD&Prof Department of Oral and Maxillofacial Surgery)

Meghna Institute of Dental Sciences

Abstract

A ranula is a pseudocystic lesion of the sublingual gland that is found in the floor of the mouth. A simple ranula is found above the level of the mylohyoid muscle and is usually the result of sublingual duct obstruction. A plunging ranula refers to a pseudocyst that occurs with salivary duct rupture and is found below the level of mylohyoid muscle. Thus, as a pseudocyst, it lacks true epithelial lining the treatment is either marsupialization or more often excision of entire sublingual gland. Occasionally the lesion reoccurs if the entire sublingual gland or other gland causing them is not excised with the lesion. In this poster, i am going to present a new method mucosal tunnel technique, which is done by making 2 parallel incisions across the top of the protruding ranula 2–3 mm apart, and dissected the soft tissue along the incisions to it well. This is safe, effective, simple and outcome is satisfactory with this technique.

Abstract No: 0933

Decompression

Dr. Romala SG Satyasai

Vishnu Dental College

Abstract

Decompression (latin de = undo, compression = pressure) is a process of relieving pressure in order to terminate a pathological process like cystogenesis or even tumorigenesis. It is a conservative method of management of odontogenic cysts & even some less aggressive tumours like unicystic ameloblastoma. A number of devices can be used for employing this technique like tip of Ryle's tube, stainless steel tube, suction tube & so on. The aim of all these decompression devices is to stop the pathogenesis of cyst or tumour by keeping an opening between the cystic lesion and oral environment during treatment. Patients are instructed maintain good hygiene at the site by irrigating with normal saline and to have regular follow ups every month. During this process, the size of lesion decreases in size, which can then be completely enucleated & curetted. This procedure can take 7–12 months. Number of studies reported that the size of cyst regressed after employing decompression technique. This poster presentation illustrates series of cases successfully treated in our institute by employing decompression technique. This was very beneficial to patients as it avoided aggressive treatments like resection. This poster presentation highlights the use of decompression technique in management of odontogenic cysts and tumours.

Abstract No: 0939

Dens Invaginatus Associated Cyst

Dr. Aakansha Bhardwaj

Jaipur Dental College

Abstract

Background

Dens invaginatus(DI) meaning tooth within a tooth is a rare developmental anomaly of the tooth affecting mostly the permanent maxillary lateral incisor. This malformation of teeth results from the invagination of the enamel organ into the dental papilla during the soft tissue development. Males are more commonly affected by a ratio of 3:1. periapical lesions associated with di are abscess(20%),-granuloma(12%) and cysts(37.33%).

Objectives

The present case describes the clinical and radiographic findings related to di and highlights those features which may indicate the presence of a previously undetected invagination.

Case report

A 13 year old male patient reported with a complaint of asymptomatic swelling in the left palatal region since 3 months. Intraorally, a swelling firm in consistency was seen on the hard palate extending from 22 to 24, measuring about 1 cm in diameter. The teeth were free of caries and discoloration. However 22 did not respond to thermal pulp testing. Panoramic radiograph revealed the presence of a periapical radiolucency surrounded by a sclerotic border in 22. The clinically missing 23 was impacted and 22 showed the presence of a wide pulp chamber which contained a large pulp stone. There appeared to be a radiopaque invagination from a lingual pit towards the root apex crossing the CEJ. So, we concluded it to be a di with a pulp

stone. We planned to enucleate the cyst along with the extraction of 22 and impacted 23. The enucleated cyst was sent for histopathological examination and was diagnosed as radicular cyst.

Conclusion

Di presents with high incidence of pulp infections since the endodontic treatment of these teeth are not easily performed, so early diagnosis with treatment is necessary for the prevention of large lesion occurring in association with di such as that seen in present case.

Keywords Dens invaginatus, radicular cyst.

Abstract No: 0949

Gorlin Goltz syndrome: a case report

Dr. Praneet K Rana

AFMC

Abstract

The Gorlin-Goltz syndrome is of particular interest to the oral and maxillofacial health experts. The importance of recognition of this syndrome is because of its malignant potential. It is an infrequent multisystemic disease, which is inherited in an autosomal dominant manner comprising the triad of basal cell nevi, jaw keratocysts, and skeletal anomalies. The Gorlin-Goltz syndrome is also known as basal cell nevus syndrome, multiple basal cell carcinoma syndrome, gorlin syndrome, hereditary cutaneomandibular polyonocosis, multiple nevoid basal cell epithelioma-jaw cysts or bifid rib syndrome. The diagnosis of gorlin-goltz syndrome can be established when two major or one major and two minor are met as would be described. It is fundamental to know the major and minor criteria for the diagnosis and early preventive treatment of this syndrome. In order to be able to establish early diagnosis of nbccs, specialists should carry out clinical and imaging examinations in early ages of life. The fact that its transmission is autosomal dominant with good penetrance implies the need of genetic counselling. This poster is a representation of the case of a 28-year-old female with major and minor features of the gorlin-goltz syndrome who reported to our institute.

Abstract No: 0955

Juvenile psammomatoid ossifying fibroma: our experience with a giant lesion!

Dr. Vinanthi P.V, Dr.K.Ranganath

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Abstract

Fibro - osseous lesions (FOL) are a group of disorders characterized by replacement of bone by a benign connective tissue matrix. They predominantly affect the craniofacial bones and the jaws. They include ossifying fibroma (OF), fibrous dysplasia (FD), and cemento - osseous dysplasia (COD). Ossifying fibroma is of two types, conventional and juvenile ossifying fibroma. Juvenile ossifying fibroma (JOF) is a rare locally aggressive, osseous neoplasm that mainly affects children and young adults. Clinically, it presents as an asymptomatic expansion of the affected bone. The most commonly involved site is the facial bones (85%), followed by calvarium (12%)

and mandibular region (10%). In about 3% of the reported cases, lesion has been found extracranially. Intracranial involvement has been seen in the neoplasms that arise adjacent to the cribriform plate. It has a high tendency to invade and recur. Juvenile ossifying fibroma (JOF) has two histopathologic variants, trabecular juvenile ossifying fibroma (TJOF) and psammomatoid juvenile ossifying fibroma (PJOF). Trabecular juvenile ossifying fibroma (TJOF) mainly involves the jaws. Psammomatoid juvenile ossifying fibroma (PJOF), has a predilection for sinonaso-orbital region. The ethmoidal sinuses are most commonly involved, followed by frontal, maxillary, and sphenoid sinuses. In addition to its aggressive behavior, pjof also has a very high tendency to recur, about 30%–56% of the cases have shown recurrence. We would like to share our experience about a case of aggressive juvenile psammomatoid ossifying fibroma, which was crossing the midline.

Abstract No: 0964

Amniotic band syndrome of face

Dr. Shivani Taank

Rungta College of Dental Science and Research

Abstract

Amniotic band syndrome is a set of congenital malformations, ranging from minor constriction rings and lymphoedema of the digits to complex and bizarre multiple congenital anomalies of face. It involves fetal entrapment in strands of amniotic tissues. Two pathogenesis theories have been put forward the endogenous and exogenous theory. It is found approximately 1 in 1200 live births. This poster presents a case of a new born with amniotic band syndrome of face which was surgically treated.

Abstract No: 0969

Radicular Cyst - A Case Report

Dr. Bindhya Mani Prakash

Buddha Institute of Dental Sciences and Hospital

Abstract

Background

A cyst is a pathological cavity lined by epithelium, having fluid or gaseous content that is not created by the accumulation of pus. The periapical cyst (also termed as radicular cyst) is the most common odontogenic cyst. The radicular cyst arises from epithelial remnants stimulated to proliferate by an inflammatory process originating from pulpal necrosis of a non vital tooth. Radiographically, the classical description of the lesion is a round or oval, well circumscribed radiolucent image involving the apex of the tooth.

Aims/Objective

Enucleation of cystic lesion with respect to 35,36,37.

Methods

Enucleation of cystic lesion with respect to 35,36,37 under local anesthetic.

Result

Biopsy of enucleated cystic lining confirmed the diagnosis of radicular cyst.

Conclusion

Choice of treatment for radicular cyst is complete enucleation of cystic lining followed by extraction of involved tooth.

Abstract No: 0976**Comparison of buccal fat pad and nasolabial flap in the treatment of osmf**

Dr. Priyanka K

Narayana Dental College & Hospital

Abstract**Aim**

To evaluate the use of buccal pad of fat and nasolabial flap as a treatment modality for the treatment of oral sub mucous fibrosis.

Materials and methods

The study sample was derived from the population of patients who presented, with restricted mouth opening of less than or equal to 25 mm, to the department of oral and maxillofacial surgery, Narayana dental college and hospital Nellore. This study compared use of buccal fat pad and nasolabial flap for the management of oral sub mucous fibrosis. A total of 10 patients were selected for study. These 10 patients were randomly divided into two groups, group 1 and group 2. The group 1 patients were treated by buccal fat pad and group 2 were treated with nasolabial flap. The parameters assessed were mouth opening, burning sensation, esthetics on post operative 1st day, 1st week, 1 month, 3 months and 6 months. Results: the mean preoperative mouth opening in group 1 was 11.6 mm and in group 2 was 14 mm. The mean post operative mouth opening after 6 months group 1 30.4 mm and in group 2 was 27.8 mm. Patients treated with buccal fat pad had decreased burning sensation. Buccal fat pad were esthetically more acceptable when compared to nasolabial flap. Conclusion: buccal fat pad is a feasible and a reliable option than nasolabial flap.

Abstract No: 0978**Lincoln's Highway**

Dr. Seelam Madhuri, Dr. Srivatsa, Dr. Vandana Shenoy, Dr. Ashwan

Thai Moogambigai Dental College

Abstract

Visceral vascular space of head and neck connects base of the skull to the middle mediastinum. In 1929, Mosher called visceral vascular space as Lincoln's highway. It is the potential space within carotid sheath from the jugular foramen and carotid canal at the base of the skull to the pericardium or middle mediastinum. The carotid sheath is a fascial layer that has association with three deep fascial layers but anatomically separates from pre-vertebral, pre-tracheal and investing fascial layers. Since it receives contribution from all the three fascial layers, it can be involved in secondary infections from other fascial spaces by direct spread. Viscero vascular space lies posterior to

parapharyngeal space, lateral to retropharyngeal space, anterolateral to pre vertebral space, medial to parotid space and styloid process. Complications of space infections include upper airway obstruction, pneumothorax, pneumomediastinum, vocal cord paralysis, Horner's syndrome, internal jugular thrombophlebitis. The contrast enhanced computed tomography is best for diagnosing space infections. The spread of infection to mediastinum via Lincoln's highway is a cause of significant morbidity and mortality in immunosuppressive patients.

Abstract No: 0985**Primary tuberculous granuloma in maxilla - a rare case report**

Dr. Swetha Barapati, M.Suresh Kumar (HOD and Prof, Department of Oral & Maxillofacial Surgery)

Meghna Institute of Dental Sciences

Abstract

Tuberculosis is a chronic granulomatous disease caused by Mycobacterium tuberculosis. There are two forms namely primary and secondary tuberculosis. Pulmonary tuberculosis is the most common form of primary tuberculosis. Primary tuberculosis in extrapulmonary site, though very uncommon, can occur in any site such as skin, brain, bone, eye and oral cavity. In this poster, I am presenting a 43 year old male patient who had swelling in the right maxillary region since 1 month associated with pain. Histopathological report revealed Langhans' giant cells suggestive of tuberculous granuloma. This report emphasizes the fact that primary oral tuberculosis should also be considered as soft tissue swellings, as the communicable nature of the disease demands early diagnosis and treatment.

Abstract No: 0986**Mucormycosis Associated Palatal Necrosis**

Dr. Akarsh R, Dr. Sanjiv C Nair

Bangalore Institute of Dental Sciences

Abstract**Background**

Mucormycosis is an opportunistic fulminant fungal infection, which mainly affects immuno-compromised patients. The infection begins in the nose and para-nasal sinuses due to inhalation. Any ulcer or extraction in the mouth can also serve as a portal of invasion of the fungal spores. It can affect the lungs, central nervous system, gastrointestinal tract, and skin (usually in burn patients) but is known best for its rhinocerebral presentation, which is usually initiated with sino-nasal involvement further progressing to the orbit and the brain by direct invasion or through the blood vessels. The fungus invades the arteries leading to thrombosis that subsequently causes necrosis of hard and soft tissues.

Aim

The current poster is aimed at the recognition of 2 cases of mucormycosis and the treatment protocol followed for the management of the same in our unit.

Review of literature

A total of 26 articles were reviewed from the PubMed database. There is a general agreement that mucormycosis is a disease affecting

patients with immune deficiency. Early diagnosis and intervention plays a crucial role in arresting the course of the disease. Authors believe that combination management of aggressive anti-fungal therapy and surgery would help to limit the infection, hence, reducing the morbidity and mortality rates.

Conclusion

Mucormycosis seems to be a disease of the immuno-compromised. The protocol followed at our center involved aggressive resection of the involved area followed by long term management with anti-fungal medicaments with periodic examination at certain intervals of time.

Abstract No: 0992 Bony Exostosis of the Skull

Dr. Aditi Bardia Ghorawat

Sri Aurobindo Institute of Medical Sciences

Abstract

Bony exostosis also called an osteoma, is a common benign slow growing tumour located in bones (flat or long bones) or in soft tissue (choroid plexus). In the oral and maxillofacial region, they can appear mostly in the paranasal sinuses; frontal sinuses (80–96%), ethmoid air cells (2–15%), maxillary sinuses (2–5%), and sphenoid sinus (very rare affected). Osteomas are mainly asymptomatic and account for 0.43% of tumor in the general population with an incidental finding on 1% of plain radiographs and on 3% of computed tomography (ct) scans. The pathogenesis of osteomas is controversial. Three theories were identified, namely embryologic, infectious and traumatic. Exostoses do not show any consistent pattern of occurrence with respect to location, size or number. In many cases, an exostosis is asymptomatic, and found incidentally during a medical examination. Although, peripheral osteomas are usually benign innocuous lesions, their size and prominent location on the visible parts of the face makes the surgical intervention necessary. The treatment generally consists of en bloc resection or grinding of the tumor using a high-speed drill. For large orbitocranial osteomas, combining the craniotomy with an orbitotomy makes a single-stage radical excision possible. In this poster, I am reporting a rare case of multiple peripheral osteomas of the skull, cranium and supra-orbital region without involvement of the frontal sinus, which were treated by surgical excision and recontouring using a bi-coronal flap.

Abstract No: 0994 Dentigerous Cyst

Dr. D.Akshaya Subhashinee, Dr. K. Srivatsa, Dr. Senthil Kumar, Dr. Laavanya

Thai Moogambigai Dental College and Hospital

Abstract

Dentigerous cysts are benign odontogenic cysts associated with the crowns of teeth. It may involve impacted, unerupted permanent teeth, supernumerary teeth, odontomas and rarely deciduous teeth. They are usually present in the second or third decades of life and are rarely seen during childhood. The mandibular third molar and maxillary canines are involved most frequently. Dentigerous cysts are the most common diagnosed cyst after radicular cyst in the maxillofacial

region. They are often asymptomatic and diagnosed accidentally during routine radiographic examinations. Radiographs show unilocular radiolucent areas associated with the crowns of unerupted teeth. The cysts have well-defined sclerotic margins. Complications such as tooth displacement, ectopic eruption, tooth impaction and adjacent tooth root resorption, cortical expansion with facial asymmetry, paresthesia, pathological fracture, and even malignant transformation may occur. Despite these classical features, definitive diagnosis must always be based on histological examination.

Abstract No: 0995 Cemento Ossifying Fibroma

Dr. M.Shalini

Sri Ramakrishna Dental College & Hospital

Abstract

Ossifying fibroma is a rare, destructive, deforming, slow growing benign fibro osseous tumor. It is usually found in the craniofacial bones with the mandible being the most common site. Less commonly the orbit, paranasal sinuses or sometimes the maxilla have been involved.

Background

Cemento ossifying fibroma (COF) is a benign neoplasm characterized by replacement of normal bone by fibrous tissue and varying amounts of newly formed bone or cementum like material, or both. In addition, the COF often shows variations in clinical, radiographic and histopathologic features, hence require different treatment options.

Aim

To discuss about the rare occurrence of cof in the maxilla, the clinical characteristics, radiographic and histopathologic features and the surgical treatment modalities.

Case report

A case of cof in maxilla, a rare occurrence in a 40 year old female with the chief complaint of swelling in upper left middle third of face for 6 months with loosening of teeth for past 4 months.

Findings

Diffuse swelling over left middle third of the face extending superiorly below the infra orbital rim. Anteriorly 1.5 cm away from the midline, inferiorly 0.5 cm below the tragus line, laterally 1 cm anterior to tragus. Intraorally, over left maxilla extending anteriorly up to 24 region, posteriorly behind maxillary tuberosity. Computed Tomography (CT) showed expansible lytic lesion with calcific foci involving the floor of left maxillary sinus causing bony erosion. Histopathological reports also showed connective tissue consisting of features suggestive of cof.

Conclusion

The behavior of the tumor governs the required surgical treatment which may range from simple curettage to radical resection of the jaws.

Abstract No: 1001 A look at aggressive lesion plexiform ameloblastoma: a case report

Dr. Tejal Ramchandra Ragji

Pacific Dental College and Hospital

Abstract

Ameloblastoma is a benign odontogenic tumour of epithelial origin which exhibits locally aggressive behaviour and high level of recurrence rate. Larger aggressive lesion requires more radical approach

resulting in large jaw defects. A case report of a 19 year old male with chief complaint of swelling in lower right back region of jaw which was hard and slowly growing in size. Incision and drainage was done in some private clinic before he reported to the department. After thorough examination segmental resection followed by reconstruction with titanium plate was planned. Patient had no complain during follow up periods. Surgical resection of ameloblastoma is good treatment of choice where aggressive treatment is required, followed by reconstruction of defects allowing good functional and esthetic outcomes.

Abstract No: 1003 **Traumatic extraction-osteomyelitis - a case report**

Dr. Jebina D

Rajas Dental College and Hospital

Abstract

Background

Osteomyelitis is an extensive inflammation of a bone involving the cancellous portion, bone marrow, cortex and periosteum. It maybe localized or may involve a large portion of the bone. It can be acute or chronic. Mandible is the most common facial bone affected by osteomyelitis because of its lone blood supply. In chronic suppurative osteomyelitis, the bone is more radio-opaque because of dead bone. The poster describes the surgical treatment of chronic suppurative osteomyelitis of the mandible which is thought to be caused by traumatic extraction.

Methods

An antibiotic course was given pre-surgically. Under local anesthesia with sedation, the sequestrum was removed with the involved teeth by intra-oral approach. The bony walls overhanging the cavity resulting from the removal of sequestrum, was removed and smoothed with a round headed surgical bur which prevents dead space formation. Antibiotic therapy was given post surgically for a week.

Results

The specimen was sent for histo-pathological review and results confirmed it as osteomyelitis. On review, the patient was asymptomatic. He had no pain or discomfort. Clinical and radiographic findings were normal.

Conclusion

Osteomyelitis is no longer a severe infection producing systemic involvement. Meticulous surgical debridement re-establishes vascularization to the affected area, and along with antimicrobial therapy results in better prognosis which is more evident in this case.

References

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Abstract No: 1014 **Vagal nerve schwannoma -a case report**

Dr. Jagadish.V, Prof.Dr.M.R.Muthusekar PROF.Dr.Salimthoma S

Saveetha Dental College and Hospital

Abstract

Background

Vagus nerve schwannoma is a rare benign neoplasm that usually presents as an asymptomatic slow growing mass. The diagnosis can be difficult to make and complete surgical excision is challenging due to the proximity of the vagus nerve fibers from which it originates. The most common symptom associated with vagus nerve schwannoma arising in the neck is hoarseness due to vocal cord palsy.

Case report

We report a case of 60 year old female, who presented with chief complaint of swelling in the left neck region for past 1 month. On examination, swelling was found to be in left parapharyngeal region which was movable horizontally. Computed Tomography (CT) scan neck showed a large soft tissue mass compressing the left thyroid lobe and displacing carotid artery anteriorly. Mass was excised surgically. Post-operative histopathologic examination revealed bundles of packed spindle cells in waves with predominant antoni a cells confirming as vagus nerve schwannoma.

Conclusion

Vagus nerve schwannoma is a rare entity. Most of the patients presents with slow growing mass with no neurological symptoms. It should be distinguished from other tumours before planning for surgery to avoid complications. Surgical excision is the choice of treatment with potential complication of vocal paralysis in some cases.

Abstract No: 1017 **5-Fluorouracil: is it really effective in odontogenic keratocyst**

Dr. Sourav Sarkar

Dayananda Sagar College of Dental Sciences and Hospitals

Abstract

Background

Odontogenic keratocyst (okc) is a very aggressive cyst and is widely known for its high recurrence rate. Till date there is no such optimal treatment protocol nor there is any definite aspect solely contributing to the recurrence of okc. Previously many adjunctive procedures have been practiced following complete enucleation of okc to reduce the recurrence, one of which is chemical cauterization by carnoy's solution. Carnoy's solution, which contained glacial acetic acid, absolute alcohol, chloroform and ferric chloride, had convincing results in reducing recurrence of okc. But lately chloroform was withdrawn from its composition due to its carcinogenicity, but studies showed higher recurrence rates with the chloroform free carnoy's solution than the former. 5-fluorouracil (5-fu), a chemotherapeutic antimetabolite drug, has been successfully used in basal cell carcinoma of head and neck. Recent studies have showed satisfactory results in avoiding recurrence in okc by 5-fu due to its similar etiopathogenesis with basal cell carcinoma.

Objective

To evaluate the effectiveness of 5-fluorouracil in preventing the recurrence of odontogenic keratocyst.

Method

This poster presents our experience of 5-fu in five different cases diagnosed as okc. 5-fu was applied topically following complete enucleation of cystic lesion and clinical and radiographic evidences of recurrence were monitored within the follow up period of 8 months.

Conclusion

All the five cases of okc showed no evidence of recurrence clinically and radiographically till 8 months of follow up.

References

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Abstract No: 1018**Recurrence of odontogenic keratocyst - an operative dilemma**

Dr. Sreeshas

MES Dental College

Abstract

A 49 year old male patient reported to the dept of oral and maxillofacial surgery with chief complaint of swelling over the left side of the face. History revealed a similar swelling 4 years back which was diagnosed as an odontogenic cyst and managed by enucleation. Clinical examination showed unilateral swelling extending from posterior mandibular region up to the ascending ramus. Radiographic findings showed multilocular appearance with destruction of ramus and condyle on left side and lesion extending to temporal fossa. Histopathology findings confirmed the lesion as odontogenic keratocyst arising from the epithelial lining and proliferating into the connective tissue layer of the cyst. Submandibular and preauricular incisions placed cyst enucleation with infratemporal clearance, segmental resection & reconstruction was done with titanium plate.

Abstract No: 1035**Pleomorphic adenoma of submandibular gland-a case report**

Dr. Sampath Kumar Pala

MNR Dental College

Abstract

Salivary gland tumours are rare, comprising less than 3% of all neoplasia of head and neck tumours. Pa of the submandibular and sublingual gland is quite uncommon and comprises rest 8–10% pleomorphic adenoma (pa) comprises 80–90% of these benign parotid neoplasms

Method

A case of pleomorphic adenoma at submandibular region in 32 years female patient managed by surgical excision of sub mandibular gland done.

Results/findings

The swelling was not associated with pain. There is frequent history of fever associated with swelling. Patient had difficulty in mouth opening and dysphagia. Clinical, radiological and histopathological reports concluded the diagnosis of pleomorphic adenoma.

Conclusion

Pleomorphic adenoma of sub mandibular gland is rare and can present difficulty in diagnosis in its heterogeneous histology and a possible malignant transformation, an incomplete capsule that can determine a recurrence.

Abstract No: 1036**Surgeons perspective of gorlin goltz syndrome-a clinical study**

Dr. Rajasekhar, Prof.Dr.C.Prasad Assoc. prof.Dr.K.Arunkumar Asst prof.Dr.Rohini

Tamilnadu Government Dental College and Hospital, Chennai

Abstract**Background**

A retrospective study to evaluate the clinicopathological features and treatment modalities of keratocystic odontogenic tumors (KCOT) associated with Gorlin-Goltz syndrome (GGS) in our institution from 2015 to 2018.

Aims & Objectives

A clinical study on patients who had features of ggs without basal cell carcinoma are treated to avoid recurrence and to improve the patient quality of life.

Method

Five patients with provisional diagnosis of ggs were included in the study. The treatment modality followed was enucleation along with chemical cauterization.

Results

All patients presented a multiple kcot. The average age of 4 male and 1 female patients was around 10–35 years. 9 lesions (64%) were presented in mandible, and 5 lesions (36%) in maxilla. Most of the tumors presented a multilocular lesion associated with multiple impacted teeth.

Conclusion:

KCOT is a frequent manifestation of GGS and can be its first sign, mainly in young patients. Early diagnosis of the syndrome and a long follow up period are important to avoid recurrence. Moreover, a multidisciplinary team is required, to improve the diagnosis and quality of life.

References

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Category – Orthognathic Surgery and Esthetic Surgery

Abstract No: 0135

The chin renewed - modified orthomorphoc surgery to correct facial asymmetry

Dr. Shekinah Grace Divya Philip

Sri Ramachandra Dental College

Abstract

Noticeable facial asymmetry has an enormous psychosocial impact on the affected individuals. It is mostly a consequence of developmental anomalies, disease or trauma. Surgical reconstruction is usually indicated in most instances. Orthognathic surgery is unable to correct completely the contour deformity when there is an alteration in the shape of the jaws. In such cases, orthomorphoc principles come into play. Orthomorphoc surgery consists of an osteotomy aimed at restoring the morphology. Orthomorphoc correction aims to correct deformities of jaw shape and contour without affecting occlusion. This is a case report of a young female patient who reported with complaints of facial asymmetry and a deficient chin. She was a known case of unilateral Temporomandibular joint (TMJ) ankylosis. TMJ ankylosis mass release was the primary surgery done 8 years prior, with the plan for facial asymmetry correction as a secondary procedure at later date. As the patient was undergoing orthodontic treatment to correct her occlusion, the aim was to address the chief complaint without disturbing her occlusion. Thorough pre operative planning was finalized with a plan of modified orthomorphoc surgery with use of allogenic bone graft. The final treatment plan was to mobilize just the inferior border of the mandible, moving it anterolaterally; there by correcting the facial asymmetry and achieving good antero-posterior dimension of the chin. This e-poster highlights the management of this unique case.

Abstract No: 0217

Evaluation of hard and soft tissue changes after orthognathic surgery

Dr. Elsin Tintu Varghese

Al Badar Rural Dental College and Hospital

Abstract

Background

Orthognathic surgical procedures have a significant impact on the treated individuals. The possible improvement with orthognathic surgery are important considerations, as the perception of aesthetic improvement might differ between people with different backgrounds.

Aims and Objectives

This study was conducted to evaluate hard and soft tissue changes after orthognathic surgery in patients having convex profile.

Materials and methods

Radiological evaluation was done by comparison of preoperative (t0) lateral cephalogram which were taken a week before surgery and

postoperative (t1) lateral cephalogram were taken at 3rd month for all the 10 patients included in this study. Preoperatively and postoperatively limited cogs analysis and limited legan analysis was done.

Results

The hard tissue changes were compared to established norms given by burstone et al. using student value test was found to be insignificant with $p = 0.99$ and the soft tissue changes were compared to established norms given by legan et al. using student value test was found to be insignificant with $p = 0.9280$, indicating normalization of parameter values postsurgery.

Conclusion

In this study, the selected postsurgical hard and soft tissue cephalometric parameters showed normalization with the esthetic norms established by burstone et al. for hard tissue and legan et al. for soft tissue. statistically significant changes were found between the presurgical and postsurgical parameters.

Abstract No: 0223

Methods in perceiving changes after orthognathic surgery

Dr. Sreelekshmy Raj

Al Badar Rural Dental College and Hospital

Abstract

Background

Orthognathic surgery causes changes in shape and position of the overlying soft tissue, resulting in alteration of facial aesthetics. In recent times, aesthetic aspects of surgery are as important as functional goals. Assessment of an individual appearance as perceived by their peers and the possible improvement with orthognathic surgery are important considerations when planning the surgical treatment. Hence, there is a need to evaluate hard and soft tissue changes post operatively after orthognathic surgery and also to evaluate the perception of attractiveness due to change in profile after orthognathic surgery.

Aims

The aim of this presentation is to discuss various methods in perceiving changes after orthognathic surgery.

Discussion

The various methods for assessing the outcome of orthognathic surgery are:- clinical assessment method, radiographic assessment using lateral cephalogram, Posteroanterior (PA) view, 2d photogrammetry silhouette's method, videography etc.

Abstract No: 0290

Surgery- First Approach in Orthognathics

Dr. Vrushika Mahajan, Dr. Rajesh Kshirsagar

Bharati Vidyapeeth Dental College and Hospital, Pune

Abstract

Aim

The purpose of this poster is to report our experience with the surgery-first approach (SFA) for correction of skeletal class iii malocclusion. To the best of our knowledge and subsequent literature

review we found very few case reports of asymmetric setback of mandible using sfa.

Method and material

A 22 year old male visited our institute with chin deviation to the right, concave profile, acute nasolabial angle, proclined upper incisors, anterior open bite and mild crowding in lower anteriors, sfa followed by orthodontics was chosen treatment modality.

Results

SFA for mandibular asymmetric setback using bilateral sagittal split osteotomy gave an improved nasolabial, mentolabial and chin-throat angle, class I molar and canine relationship.

Conclusion

With the advantages of early improvement in patient aesthetics and dental function, the reduction in treatment duration of orthodontics; sfa can be regarded as a valuable alternative for the conventional surgical orthodontic approach.

References

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Abstract No: 0303

Maintenance of condyle-proximal segment position in orthognathic surgery

Dr. Ashish Chalana

Mahatma Gandhi Dental College & Hospital

Abstract

Condylar displacement following mandibular osteotomy has been considered as the primary factor in the occurrence of immediate postoperative relapse during maxillomandibular fixation and after release of fixation. Eventual development of temporomandibular joint (TMJ) dysfunction and masticatory insufficiency have also been attributed to displacement of the condyle in the glenoid fossa after orthognathic surgery. Considerable attention has been directed to maintaining the preoperative condyle-proximal segment position in order to reduce postoperative complications of skeletal relapse and TMJ dysfunction. Numerous techniques have been developed in the past 14 years to achieve this objective. The use of a proximal segment orienting device (PSOD) improves short-term mandibular stability and reduces TMJ symptoms. The use of a modified Champy bone plate to prevent proximal segment rotation and to allow the condyle to passively seat in the fossa. The difficulty with most of these techniques is that the devices are cumbersome, technique-sensitive, and mostly limited to procedures involving only the mandible. This poster represents the simplified condylar positioning device (CPD) to intraoperatively reposition the proximal segment in its presurgical position. The objective is to evaluate the use of this device by comparing the postoperative condyle proximal segment displacement and rotation with or without the use of the CPD.

Abstract No: 0323

Distraction osteogenesis in omfs: a historic perspective and future directions

Dr. Abhishek Patley

New Horizon Dental College and Research Institute

Abstract

Distraction osteogenesis (DO), also called callus distraction, callotaxis, osteodistraction, and distraction histogenesis is a biological process of regenerating neofomed bone and adjacent soft tissue by gradual and controlled traction of the surgically separated bone segments. DO of facial bones provides an excellent system of membranous bone formation. The bone is generated by stretching a callus that develops following corticotomy or an osteotomy of the facial bones. The method is based on the tension-stress principle proposed by Ilizarov. The gradual bone distraction creates mechanical stimulation which induces biological responses and consequently bone regeneration. This is accomplished by a cascade of biological processes which may include differentiation of pluripotential cells, angiogenesis, osteogenesis, and bone mineralization. The use of DO in oral and maxillofacial surgery has increased enormously especially for severe bone deficiency such as: (1) deficient maxilla or midface, (2) deficient hypoplastic mandible, and (3) deficient alveolar bone prior to implants placement. Physical and biological parameters affecting the success of DO include the macro and microscopic bone anatomy, the direction and amount of the applied distraction forces, and the regenerative capacity of the tissues involved. Force transduction via adjacent structures (joints, ligaments, muscles, and soft tissue) influences the regeneration of the tissue between the bone fragments by modulating the stress produced within the callus. The clinical applicability of DO is dependent upon device-related and tissue-related factors.

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Abstract No: 0330

Versatility of Genioplasty

Dr. Piyush Chhabra

Buddha Institute of Dental Sciences & Hospital

Abstract

Background

Role of chin in facial profile is most obvious and an outstanding feature in facial appearance. The structure of the chin determines facial attractiveness and is directly linked to quality of life. The deformities of the chin should be considered in all three planes: AP, vertical and transverse. Genioplasty can be used as a single procedure or it can be used as an adjunctive procedure along with other major

osteotomies of the jaw bone. It can be used to augment, reduce, straighten or lengthen the chin.

Aims and objectives

The goal of surgical treatment of chin deformities is to achieve maximum function, aesthetics, and stability. The objective of this study is to evaluate the role of genioplasties in various chin deformities.

Method

Diagnosis and treatment planning were made on the basis of chief complaint, family history, clinical examination, and cephalometric tracings. Under general anaesthesia (GA), incision was given in the lower lip and carried laterally towards cuspid area of both the sides. Mucoperiosteal flap was reflected to expose the inferior border of the mandible and the symphysis. Dissection was then extended posteriorly, and soft-tissue sleeves on mental nerves were gently dissected to minimize the retraction tension on nerve and bony cut procedures were performed to mobilize the segments. Wires were tightened to pull the mobilized portion of the chin to the desired position.

Result

Results were predictable and stable. Chin advancement procedures as well as reduction genioplasty gave favourable results with no post operative complications.

Conclusion

Orthognathic surgery is one of the highly specialized branches of oral and maxillofacial surgery. Genioplasty addresses both psychological and aesthetic concerns.

Abstract No: 0370

Evaluation of esthetic outcome following orthognathic and orthomorphic surgery

Dr. Nagamani K T

Al Badar Rural Dental College and Hospital

Abstract

Background

Orthognathic surgeries alone, however, often are unable to resolve contour defects arising from asymmetric growth disparity. For this reason in the management of facial asymmetry, orthomorphic principles of management are an adjunct to orthognathic surgery in adults. The orthomorphic correction performed on the side of the mandible corresponding to facial dysmorphology.

Aims and Objectives

The present study was conducted to evaluate aesthetic outcome following orthognathic and orthomorphic surgery for mandibular asymmetry in the department of oral and maxillofacial surgery, et al - badar rural dental college and hospital, kalaburagi from July 2013 to October 2015.

Materials and methods

Pre-operative (t0) frontal photographs, p.a. cephalograms, and lateral cephalograms were taken 1 week prior to surgery. Post - operative (t1) frontal photographs, p.a. cephalograms, and lateral cephalograms were taken at 3rd month after surgical correction. Photographical and p.a. cephalogram study was done to evaluate the correction of chin deviation. Lateral cephalogram measurements were used to evaluate chin advancement.

Results

Significant correction was achieved between pre-operative and post-operative evaluation of frontal photographs, PA cephalogram and lateral cephalogram. The mean correction in the angle of chin deviation obtained was 4.57 degrees in photographic study with t value (-5.6) and p value.

Abstract No: 0393

Distraction osteogenesis for management of obstructive sleep apnoea secondary to tmj ankylosis

Dr. Priyangana Nath

Vydehi Institute of Dental Sciences & RC

Abstract

Aim

To evaluate the effects of distraction osteogenesis in management of obstructive sleep apnoea in a patient secondary to temporomandibular joint ankylosis.

Materials and method

A patient with temporomandibular joint ankylosis with obstructive sleep apnoea reported to our department with the chief complaint of restricted mouth opening. On examination, mouth opening was 2 mm. Firstly, temporomandibular joint osteoarthrectomy with interpositioning of the temporalis myofascial flap and bilateral coronoidectomy was done and a maximal mouth opening of around 20 mm was achieved. After 4 months, he came back with chief complaints of snoring, poor sleep, daytime sleepiness, fatigue, inability to concentrate and multiple episodes of waking up at night. Examination revealed mandibular retrognathism and reduced posterior airway space. Distraction osteogenesis (body) was done bilaterally. Distraction at the rate of 1 mm per day was done until the posterior airway space was widened. Total distraction of 14.6 mm was achieved in the left side and 20 mm in the right side. Distractors were removed and sliding genioplasty with advancement of 7 mm was done after 2 months. This was immediately followed by meticulous postoperative jaw exercises.

Results

The patient showed significant improvement in facial aesthetics. There was marked reduction in their snoring and sleep/awakening patterns.

Conclusion

Mandibular distraction osteogenesis is an effective method for management of obstructive sleep apnoea secondary to TMJ ankylosis.

Abstract No: 0402

Minimally invasive orthognathic surgery - a wiser concept

Dr. Nirdhum Shikha

Bapuji Dental College and Hospital Davangere

Abstract

Gone are those days when it was believed that big incisions for big surgeons. Wide open conventional approach orthognathic surgery is being done since 1800 s. The number of patients opting for surgery has continued to grow with time, but the fear of going under scalpel has always deferred the patients from surgery. The concept of minimal invasive surgery (mis) has changed this belief along with fulfilling the goals of aesthetics, function and stability at the same time. With minimally invasive surgery surgeons performs the procedure in a gentler manner. This method includes endoscopic approach, ultrasonic and piezoelectric devices, along with advanced radiographic techniques. Endoscopic approach, piezoelectric devices with surgical navigation allows le fort I osteotomy with pterygo-maxillary dysjunction, bssso, ivro, distraction osteogenesis via small

incisions, creating vestibular corridors, reduced reflection with magnified visualization. The advantages over conventional method includes intraoperatively- smaller incision, reduced reflection with magnified visualization allowing soft tissue preservation, higher precision, dry operating field, average surgical time, lesser neurovascular complications, postoperatively- lesser edema and hematoma, better wound healing, faster recovery, acceptable surgical scars. To conclude, with the advancement in intraoperative instruments and use of advanced devices, it is time to shift the option of choosing mis over conventional approach considering its good feasibility, minimal blood loss, good stability and minimal morbidity.

Abstract No: 0491

Bilateral sagittal split osteotomy for correction of mandibular prognathism

Dr. Francis Marella

St. Joseph Dental College

Abstract

Bilateral sagittal split osteotomy (BSSO) is a widely used orthognathic surgical technique. Since its development, it has become the cornerstone of modern maxillofacial surgery and an important part of the everyday practice of many maxillofacial surgeons. Although alternative techniques are available to treat mandibular prognathism or retrognathism, such as intra-oral vertical ramus osteotomy or distraction osteogenesis, bsso is generally considered the golden standard to treat mandibular deformity. The elective nature of orthognathic surgery makes it very important to minimize the risk of complications and adverse effects associated with BSSO. Increasing the predictability and safety of the surgical procedure is therefore an important topic and should be of major interest to the surgeon. This poster highlights a 35 year old male patient with prognathic mandible corrected by bilateral sagittal split osteotomy procedure.

Keywords bsso, mandibular prognathism or retrognathism,

Abstract No: 0492

Minimally invasive surgery for alopecia: follicular unit extraction method

Dr. Vadlapatla Anusha

St. Joseph Dental College

Abstract

Modern hair transplantation has come long way from the days of punch hair transplant by Dr. Norman Orentreich in 1950 s to follicular unit hair transplant of 1990s and the very recent follicular unit extraction technique. The concept of follicular extraction was first described by rassman. Follicular unit extraction is a technique of harvesting intact individual follicular units directly from the donor area using 0.9 mm punches to separate follicular units from the surrounding tissues down to the level of middermis. This was followed by extraction of follicular units with forceps. It is a sutureless method of hair restoration in which hair follicles are extracted under local anaesthesia with the help of special micro punches and implanted in the bald area. Healing is quick, scarring is virtually nonexistent and

discomfort in the donor area has been virtually eliminated. The purpose of this method is the avoidance of linear scar resulting from the strip harvest technique and the desire for a naturally pain free postoperative period. This poster highlights the significance of fue technique.

Keywords follicular unit extraction, follicular unit transplantation, suturless, micropunches.

Abstract No: 0494

Correction of asymmetry of the face -a novel approach

Dr. Jones.J

Saveetha Dental College and Hospital

Abstract

Masseteric hypertrophy is considered an enlargement of the masseter muscle, it involves one or both sides of the face. It is frequently associated with involvement of other muscles like temporalis muscle hypertrophy. The muscular hypertrophy causes bony enlargement at its point of attachment due to functional remodelling. The masseter muscle causes secondary bony enlargement of the mandibular angle from functional remodelling where the muscle is inserted. On posteroanterior view, an abnormal lateral projection on mandibular angle called bone spur can be seen over the insertion of the masseter muscle. Traditional treatment involves surgical contouring of the masseter muscle or mandibular angle that can be done as an intraoral or extra oral approach. The intra oral approach is preferred because it avoids injury to the facial nerve and conspicuous scars however its more difficult than the extra oral approach. Conservative treatment modality involves use of botulinum toxin type of injection. The aim of this case report is to present a novel approach of surgical contouring of the lower jaw and injection of botox into the masseter muscle on a patient with complaint of asymmetrical face. Infusion of botulinum toxin in patients with hypertrophy of masseter muscle is A:- good and safe nonsurgical alternative to decrease the size of the muscle,give an chiseled jaw line bringing about an oval face.

Abstract No: 0507

Facial eshetics in maxillofacial surgery - its clinical and cosmetic significance

Dr. Marupalli Kavitha Patnaik, Dr.Ratnakar, Dr.Rama Mohan Kodali, Dr.Srikanth, Dr.Koteswara Rao

Dr. Sudha & Nageswara Rao Siddhartha Institute of Dental Sciences

Abstract

Facial aesthetics is now gaining most important aspect in maxillofacial surgery. Facial analysis involves evaluation of functional and aesthetic disharmonies.it is important to appreciate what constitutes ones own perception of beauty and how the clinician can translate this into successful clinical results by providing perfect diagnosis and treatment planning.this poster presents the importance of cosmetic application and therapeutic application in maxillofacial surgery.

Abstract No: 0557**Degree of predictability of soft tissue response after orthognathic surgery**

Dr. Blesson Abraham Jose, Prof. Dr. Sankar Vinod, Prof. Dr. Arun George, Dr. Ninan Thomas

MAR Baselios Dental College

Abstract

Aim of this study was to document and analyze the results of orthognathic surgery on the basis of soft tissue response to hard tissue changes. Primary purpose of orthognathic surgery is surgical correction of facial skeletal elements to restore proper anatomical and functional relationships. The soft tissue is the envelope of the skeleton; however, it has its own variables that are independent and not completely based on skeletal parameters. In conclusion soft tissue response after orthognathic surgery are predictable and is not linear changes but a more complicated and dynamic reactions.

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Abstract No: 0563**Current strategies in treatment of gummy smile**

Dr. Sofiya Kanneth, Prof.Dr.Sankar Vinod,Prof.Dr.Arun George,Dr.Ninan Thomas

MAR Baselios Dental College

Abstract

A smile can express a sense of joy, success, sensuality, affection, courtesy, and show confidence and kindness. Smile is more than a form of communication; it is kind of socialization and attraction. A smile with more than 2 mm exposed gingiva is called gummy smile. Aim of study was to analyse various treatment options of excessive gingival display. The various causes of gummy smile include altered passive eruption of teeth, dentoalveolar extrusion, vertical maxillary excess, short or hyperactive upper lip muscles (levator labii superioris, levator labii)1.treatment of the condition requires extremely well-coordinated orthodontic and surgical treatment planning and execution. Here describes a multidisciplinary approach in the successful management of a patient with severe gummy smile. Careful selection and good execution of treatment plan in the management of gummy smile to provide the superior aesthetic and functional results. Various techniques described are maxillary le fort 1 procedure along with anterior segmental set back, gingivectomy, lip repositioning and botox injections etc. Case studies have shown that, according to the type of treatment, aesthetic, dento-alveolar and skeletal consequences differ. It is therefore essential to set treatment objectives in agreement with patient expectations as of the first examination, so as to select the most appropriate form of treatment.

References

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2. Moloney F, Roger A.Westr, Uilliam McNeill, surgical correction of vertical maxillary excess: a re-evaluation, *journal of maxillo-facial surgery* volume 10, 1982, pages 84–91.

Abstract No: 0570**Bichectomy- an old technique for a new face**

Dr. Sakshi Das, Dr.B.Sridhar Reddy

Government Dental College

Abstract**Introduction**

Bichectomy or bichatectomy or simply cheek surgery is a surgical procedure involving removal of bichat fat pad. With current trend towards a leaner looking face, for people with excessive facial roundness and an overweight look this is a treatment option.performed if augmentation of the middle third of the face is desired. Objectives 1) hollow cheeks 2) improvement in malar prominence 3) improvement of self-esteem & confidence. Technique: incision: a small incision of about 5 mm in length, given at the soft tissue situated in the most inferior aspect of the zygomatic buttress carefully visualizing the Stenson’s duct orifice. Procedure: blunt dissection using a curved hemostat is done, after which bichet’s fat pad was exposed and was gently teased out, following which the area is suctioned. Suture: a single simple interrupted suture is just sufficient. Duration: the whole procedure takes around fifteen to twenty-five minutes from local anesthesia to suture. Postoperative care: analgesics are prescribed along with intense bilateral cryotherapy in the areas during 24 to 48 h. Prophylactic antibiotic can be prescribed for 5–7 days when the fat pad is not removed in toto. Considerations: bichectomy is a surgical procedure of low complexity with excellent results. However, it must be performed with care due to closely related vital structures, supported by preoperative facial evaluation and consent of the patient for practical results.

References

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Abstract No: 0576**Soft tissue changes following anterior maxillary osteotomy**

Dr. Rajat Chandrashekhar Bhende

Bharati Vidyapeeth Dental College

Abstract

Soft tissue changes following anterior maxillary osteotomy: a photographic analysis.

Background

Orthognathic surgery is considered to be the principal tool for correcting severe dentofacial skeletal discrepancies. Consequently, it has the potential to significantly alter the central esthetic unit of the face, the nasolabial region. The nose is a keystone of facial esthetics and thus is of central importance in planning and execution of orthognathic surgery. Although a number of studies pertaining to soft tissue changes of the face with the maxillary procedure can be found in the orthodontic and oral surgery literature.

Aim

The purpose of this poster is to assess soft tissue changes by comparing pre and post-operative photographs of two cases wherein anterior maxillary osteotomy in which superior repositioning greater than 2 mm and setback of around 5 mm has been performed.

Method and materials

In two selected subjects who have undergone anterior maxillary segmental osteotomy with superior and posterior repositioning soft tissue changes following the profile view and frontal view were evaluated using photographic analysis.

Result

A significant increase in nasolabial angle and mild changes in nasal tip projection, columellar labial angle and supra tip break angle was observed.

Conclusion

Soft tissue alterations following orthognathic surgery play an important role in overall success of the outcome.

Abstract No: 0653**Successful correction of post temporomandibular joint ankylotic facial asymmetry: a case series**

Dr. Shibani Abhay Nerurkar, Dr. Neelam N Andrade, Dr. Neha Aggarwal

Nair Hospital Dental College

Abstract**Introduction**

There are various disorders that lead to facial asymmetry and treating these deformities is challenging. To date, there is no ideal treatment modality that satisfactorily corrects this asymmetry and restores the complex facial anatomy. Temporomandibular joint (TMJ) ankylosis has shown to severely affect the growth of the face leading to micrognathia, retrognathia and facial deformity that requires multiple staged surgical corrections. Various methods like orthognathic surgeries, distraction osteogenesis, augmentation grafts etc. are used to restore and correct micrognathia, microgenia while simultaneously re-establishing the function. Distraction osteogenesis has been acclaimed as a successful modality for the treatment of such deformities. It is a cost-effective approach with low morbidity that simultaneously reconstructs the hard tissues and soft tissues with lesser incidence of relapse and good functional and aesthetic outcomes.

Materials and methods

This presentation will highlight a series of five cases where different applications of distraction osteogenesis were combined with various other procedures to correct post ankylotic facial asymmetry. The other procedures included genioplasty, onlay grafting, alloplastic augmentation and molinas technique.

Result

All patients showed significant improvement in function and esthetics. Outcome assessment was made using clinical photographs and radiographs.

Conclusion

Distraction osteogenesis is a versatile cost effective approach that can be customized for every patient based on their needs. It allows the surgeon to correct the deformity in various planes by using various devices, changing osteotomy designs and vectors, and along with adjunctive procedures it is most useful and effective to reconstruct facial deformities.

Abstract No: 0668**Soft tissue changes following lefort I superior repositioning: a photographic analysis**

Dr. Priyadarshini Banerjee

Bharati Vidyapeeth Dental College

Abstract**Background**

The state of the art in orthognathic surgery has shown remarkable advancement during the past decade; however, there exists paucity of data concerning soft-tissue prediction. A central principle in orthognathic treatment is to create an esthetically pleasing and balanced face in harmony with the underlying dental and skeletal structures. After any skeletal correction, there is a concomitant soft-tissue change that does not necessarily reproduce the hard-tissue movement on a 1:1 scale. Contemporary orthognathic surgical planning revolves to a large extent around the position of the maxillary incisors in relation to the upper lip. Maximum changes in this region occur with maxillary surgery and the le fort I osteotomy in particular.

Aims/objectives

The purpose of this poster is to assess soft tissue changes by comparing pre and post-operative photographs where in le fort I superior repositioning greater than 5 mm has been performed.

Methods

The width of alar base and oral commissure along with the philtrum length are evaluated in the frontal view. The nasolabial angle, interlabial gap and mentolabial angle are analyzed in the profile view. A comparative analysis of the afore mentioned shall help in predicting the soft tissue changes associated with the surgery.

Abstract No: 0739**Analysis of upper one-third of facial height in orthognathic surgery**

Dr. P. Indu, Dr.Vivek, Dr.Saravanan, Dr.Karthik

SRM Kattankulathur Dental College & Hospital

Abstract**Background/Introduction**

The evaluation of the face is the most important aspect of analysis because it is always the primary determinant of basic treatment recommendations. When analyzing the face in vertical dimension, it is divided equally into thirds and in horizontal dimension, it is divided equally into fifths. It is considered esthetic when there is quantitative equality between these vertical thirds and horizontal fifths. But it does not always follow the ratio of facial thirds and fifths. Longer faces

will have longer facial third in comparison with facial fifths. Increase or decrease in the upper one-third height or the volume can tend to change the profile view. Objective: the objective of this study is to analyze and assess the upper one-third of facial height and its applications in orthognathic surgery.

Method

A prospective and retrospective study - includes patients with a complaint of flat or protruding forehead, long face with increase in facial height and decrease in inclination of forehead. Operated patients with unsatisfactory profile due to unaddressed upper one third of face.

Results

Results will be tabulated

Conclusion

Upper one third of the face is frequently an essential component for complete facial rejuvenation. Patient's satisfaction and ultimate success can be achieved through detailed analysis and diagnosis, proper patient selection and meticulous surgical technique.

Abstract No: 0751

Obstructive sleep apnea - a review of treatment modalities

Dr. Anton Tyrone, Professor D.Pradeep Christopher, Professor Dr. Vandana Shenoy, Professor Dr.Senthil Kumar

Thai Moogambigai Dental College & Hospital

Abstract

Obstructive sleep apnea is the condition characterized by repetitive episodes of complete or partial collapse of upper airway during sleep, with consequent cessation or reduction of airflow. It is a common chronic disorder in 2–4% of adult population with high prevalence in middle aged men. In 1965 Gastaut and associates recognised obstructive sleep apnea, this observation opened a new era to respiratory medicine. The presence OSA greatly alters cardiopulmonary events during sleep. Aetiology of OSA is multifactorial, consisting of a complex interplay between anatomic, neuromuscular factors and genetic predisposition toward the disease. Obstructive sleep apnoea (OSA) is associated with increased morbidity and mortality. It is a source of attributable risk in patients with hypertension, obesity, diabetes, cardiovascular diseases. It has deleterious effects in patient's social functioning, employment and quality of life. This presentation will review the pathophysiologic nature of OSA with its current non invasive and invasive treatment modalities.

References

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Abstract No: 0754

Feasibility of computer aided surgical simulation in surgery first orthognathic approach (SFOA)

Dr. A.C.Lakshmi Rathan, Dr Vivek N MDS (Professor & HOD) Dr Saravanan FDS RCS (Professor) Dr Karthik MDS (Reader)

SRM Kattankulathur Dental College and Hospital

Abstract

Background

Conventional orthognathic surgery which necessitates pre surgical and post surgical orthodontic treatment is the most widely accepted method for the correction of skeletal or dentoalveolar malocclusion. However patients who are affected by these conditions almost always prefer a rapid resolution. With recent advancement in pre-surgical evaluation method and simulation, surgery first orthognathic approach (SFOA) has gained popularity as a contemporary treatment concept for the management of skeletal facial deformity. Recently, the development of computer-aided surgical simulation (CASS) has enabled clinicians to use the best available data for evidence-based diagnosis, treatment planning, and execution of treatment.

Objective/Purpose

The purpose of this study is to determine the clinical feasibility of planning and executing SFOA using computer aided surgical simulation technology.

Methods

A prospective study of application of CASS technology for patients undergoing SFOA.

Results

Will be tabulated.

Conclusion

To assess whether CASS improves the surgical predictability.

Reference

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Abstract No: 0755

Surgery First Approach in Orthognathic Surgery

Dr. Anandh.L, Dr.Senthil Kumar Dr.Ashwan Dr.Sathish Kumar

Thai Moogambigai Dental College AND Hospital, Chennai

Abstract

For patients with a skeletal malocclusion, traditional orthognathic treatment consists of a preoperative orthodontic preparation, orthognathic surgery and a period of postoperative orthodontics. Through combined orthognathic- orthodontic treatment, an ideal facial profile and stable occlusion can be achieved. However, the treatment duration is long, usually lasting more than 2 years. Recently, orthognathic surgery first followed by postsurgical orthodontics without pre-surgical orthodontic treatment, known as the surgery-first approach (sfa), is being favored. With considerable preoperative planning and precise surgery, the postoperative orthodontic procedure is direct and rapid; patients obtain the desired facial profile and occlusion in a much shorter period of

time. This poster will highlight the indications, advantages and limitations of surgery first approach in orthognathic surgery.

Abstract No: 0776

Step by step treatment planning of facial assymetry

Dr. Alka Mariam Mathew

Ragas Dental College, Chennai

Abstract

Background

The goal of orthognathic surgery is to establish optimal functional outcomes and provide good esthetic results. Asymmetries require a three dimensional correction by complex skeletal movements and associated soft tissue changes. Symmetry correlates with attractiveness, thus even the slightest of asymmetry is easily noticed. Poor treatment planning and midline alignment are common mistakes in treating facial asymmetry and often results in clinical depression, neurosis, poor self-esteem and general poor-quality-of-life health problems.

Aims and Objectives

The most important aspect of asymmetry correction is to establish an accurate treatment plan and perform precise orthognathic surgery. The aim of this presentation is to highlight the treatment planning procedure in facial asymmetry cases in a systematic sequential manner. Methodology: the degree of facial asymmetry was evaluated through clinical examination, photographs, study models and cephalometric analysis. The intended tentative surgical treatment plan was initially evaluated with a cephalometric prediction tracing and necessary modifications were done. The desired treatment plan was executed with a 3 dimensional model surgery. An ortho surgical discussion was done to finalize the treatment plan.

Results

With the help of intra & extra oral surgical reference markings and surgical splints the finalized treatment plan was then executed efficiently. The surgeon took adequate care to ensure passive positioning of the osteotomy segments over the surgical splint. The post operative results were correlated with the planning done in the model surgery.

Conclusion

Facial asymmetry correction is an intricate procedure as it involves complex movements of dentofacial structures and associated soft tissue components. Establishing an all-inclusive diagnosis is of paramount importance for developing a comprehensive treatment plan. Correct surgical treatment begins with a proper diagnosis with accurate evaluation of the face in all dimensions. Key words: facial asymmetry, evaluation, surgical treatment.

Abstract No: 0792

Distraction osteogenesis: q analysis of bone using ct

*Dr. Bhavana Shankar Valvi, Dr. Abhay Datarkar (Professor & Head)
Dr. Sukirti Tiwari (PG Student) Dr. Suraj Parmar (PG Student)*

Government Dental College & Hospital Nagpur

Abstract

Introduction

Distraction osteogenesis is a surgical technique in which the intrinsic capacity of bone to regenerate is being harnessed to lengthen bones or

to replace large segments of bone. It is a slow application of tensile force to a bone gap, resulting in the production of new bone & soft tissue. Quantity & quality assessment of such new bone formation using ct scan will help to prevent relapse & better surgical outcomes. **Objectives** 1) to check quality & amount of bone formation after distraction of the jaw. 2) to observe the site & architecture of newly formed bone after distraction is complete.

Materials and methods

Retrospective study which enrolled 15 patients from 10 to 18 years of age having facial deformities of maxilla and mandible reported to the department of oral & maxillofacial surgery, at our institution from January 2016 to Jun 2018. Radiographic analysis (CT) was done after 1 year of distraction osteogenesis to evaluate quantity and quality of newly formed bone. The non-distracted site was compared with newly formed bone at distraction site.

Results

Reveal that in distraction osteogenesis the bone formation is satisfactory but the distracted bone is less mineralized compared to non-distracted bone.

Conclusions

Distraction osteogenesis is a versatile technique for new bone formation. It can be used successfully in correcting a wide range of facial deformities with no major complications & also contributes to patients' satisfaction as a result of their perceived improvement in appearance and function.

Abstract No: 0808

Minimally invasive surgical approach for the correction of facial asymmetry correction using alloplastic implants

Dr. Viveka, Dr. Madhulaxmi Dr. Abdul Wahab

Saveetha Dental College and Hospitals

Abstract

Background

Facial asymmetry correction usually involves extensive bi-jaw surgeries with a comparatively long convalescence time. This correction with minimally invasive alloplastic implants was formulated to address the patients' concerns, facilitating a quick recovery and ideal cosmetic results.

Case report

A 20 year old male reported to our institution with a chief complaint of his lower jaw growing towards the right side for the past 4 months. On clinical examination, no associated syndromes were detected. His chin and nose were found to be deviated to the right side and malar prominence was absent bilaterally; occlusal cant was present. As the patient wanted a less invasive approach, alloplastic implants were planned for the malar augmentation and a sliding genioplasty was performed to mask the mandibular asymmetry.

Conclusion

Satisfactory aesthetic results were obtained. Patient is currently undergoing orthodontic treatment.

Abstract No: 0866**Combined orthodontic and surgical management of hemifacial microsomia: a case report**

Dr. Sunu VS, Dr ummarM Dr Roshni

MES Dental College

Abstract**Case report**

A 22 year old patient with chief complaint of facial asymmetry. patient had already under gone commissuroplasty and sternocleidomastoid myotomy at 6 years of age. on detailed clinical and radiological examination a diagnosis of vertical maxillary excess, retrogenia, microgenia, facial asymmetry and palsy on left side was found. patient had angles class I malocclusion on skeletal class II base with upper and lower proclination, crowding and cant in occlusal plane. following presurgical orthodontic for alignment and creating sufficient overjet the surgery was planned in 3 stages. Stage I - differential lefort I osteotomy, differential BSSO and augmentation genioplasty. Stage II - ear reconstruction. Stage III- augmentation of left side of face with fat as dermal filler.

Abstract No: 0872**Rhytidectomy**

Dr. Dharmika Jagani Banana, Dr. Pankaj Kumar Singh

Divya Jyothi College of Dental Sciences and Research

Abstract

Rejuvenation of aging face is accomplished by facelift procedure. As a result of natural aging process, the face develops a square appearance losing its youthful oval appearance. Historical evidence of rhytidectomy dates back to early 1900 s. In 1912 Hollander wrote a paper on correction of facial cutis laxa. In 1920 more extensive cervicofacial skin undermining was being performed. Manipulation of facial tissue other than skin began in early 1970 owing to better understanding of facial anatomy. In 1974 Skoog first described his deep plane facelift which emphasizes presence of interconnected skin fat musculofacial unit. Early “classic” facelift focused only on removing lax/redundant skin. Skin excision facelifts are still performed but only the temporary benefit and poor natural appearance have led to development of newer techniques. Today modern facelift uses manipulation of superficial musculoaponeurotic system (SMAS). This is the enhanced variation of general technique considered to be the gold standard facelift method. This lifts the face from deepest layers and pull upward rather than back which decreases the potential for excessively pulled back appearance. Believable beauty comes not just from tightening, it comes from redistributing the fatty tissues of face especially in high smas region.

References

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Abstract No: 0886**Intraoral distraction osteogenesis-post ankylotic deformity correction**

Dr. Sabarinathan. S, Prof.Dr.C.Prasad Associate Professor.Dr.Arunkumar Assistant professor Dr.Rohini

Tamilnadu Government Dental College and Hospital

Abstract**Introduction**

Patients with TMJ ankylosis have various degrees of anatomical facial deformities including microgenia, reduced lower facial height, and occlusal discrepancy. The correction of facial deformities following treatment of TMJ ankylosis remains a difficult and challenging problem to oral and maxillofacial surgeons. Distraction osteogenesis has recently become a mainstay for the treatment of craniofacial syndromes with mandibular hypoplasia including TMJ ankylosis.

Aims and Objectives

The purpose of this presentation is to elaborate the role of distraction osteogenesis in post ankylotic deformity correction.

Methods

Two case reports with classical clinical and radiological signs of post ankylotic deformities along with a comprehensive literature updates. Results; after the completion of treatment, there was increase in both ramal length and body of mandible in both patients and improvement in facial profile.

Conclusion

Intraoral distraction osteogenesis resulted in symmetric skeletal appearance, soft tissue lengthening, improvement in facial profile and reduces the extent of skeletal relapse.

References

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2. International journal of maxillofacial surgery 23, 321–328. Perott D.H, Umeda.H distraction osteogenesis for TMJ ankylosis.

Abstract No: 0895**Optimal occlusion with osteotomy**

Dr. Ravalika S

Sri Rajiv Gandhi Dental College

Abstract

Post traumatic facial deformities can pose a challenge to oral and maxillofacial surgeons. In an emergency situation, the trauma patient has to be managed in best possible manner. Trauma patients can experience unsuccessful initial management of post-traumatic craniofacial deformities that would benefit from secondary correction. Even experienced surgeons find it challenging in restoring form and function with established deformities after trauma as anatomical landmarks cannot be appreciated. Most common residual deformities include nasal, zygomatic, frontal, orbital, maxillary and mandibular deformities and occlusal discrepancies like posterior cross bite, deep bite, anterior open bite, malocclusion, etc. Posterior cross bite is an inadequate transverse relationship of maxillary and mandibular

relationship. It can be treated by various methods like symphysis osteotomy, bilateral sagittal split osteotomy, distraction osteogenesis, subapical osteotomy and maxillary expansion. Symphysis osteotomy can be used to correct transverse deformities, retrognathic mandible. One of the main advantage of this procedure is good healing because of bony interference. This poster depicts a case of a post traumatic facial deformity with posterior cross bite managed with symphysis osteotomy and orthodontic treatment wherein we seek to achieve the most optimal occlusion.

Abstract No: 0925

Assessment of tongue position following various procedures of dentofacial deformities

Dr. B.Sangeetha Jijendran

Vinayaka Missions Sankarachariyar Dental College

Abstract

Background

Tongue is the muscular organ of oral cavity which needs an unrestrained oral space to occupy with no compromise in its size or volume. The actual tongue position within the orofacial complex can change in response to the surgical movements. Vertical position of tongue in oral cavity space is related to the distance it lies away from the palate & its anteroposterior position is related to the distance its base lies away and anterior to posterior pharyngeal wall. The average distance between the posterior pharyngeal wall and base of tongue is 13.04 mm in males and 15.64 mm in females. The mean estimated tongue volume of the adult humans are 72.74 cc coronally and 80.18 cc sagittally. Tongue position and its effects on the airway is an important parameter to be considered in diagnosis & treatment planning of the patients with dentofacial deformities. The structural and positional adaptation of skeletal units enables the unhindered vital activities of the tongue.

Aims and Objectives

To assess the changes in the tongue position and width of the pharyngeal airway space radiographically following correction of dentofacial deformities. Materials and.

Methods

Ten patients with skeletal deformities of maxilla and/or the mandible were included whereas syndromic craniofacial deformities were excluded. Patients were treated surgically either through orthognathic surgery or distraction osteogenesis or both as needed. A retrospective study was conducted from the preoperative and postoperative lateral cephalograms of these patients.

Results

Preoperative and postoperative parameters from the lateral cephalograms were compared and results were made based on statistical evaluation.

Conclusion

Cephalometric evaluation of the tongue position has been reported to provide a high correlation with actual volumes of pharyngeal airway. Thus this study helped in assessment of the tongue position two dimensionally.

Abstract No: 0942

Distraction osteogenesis for facial deformity in TMJ Ankylosis Case

R. Paminder Singh

Maulana Azad Institute of Dental Sciences

Abstract

Background

Temporomandibular joint ankylosis has morbid sequelae, most strikingly facial deformity and obstructive sleep apnoea. Various techniques have been suggested in the past to treat these sequelae. Distraction osteogenesis currently considered the most accepted and favourable treatment option for management of facial deformity and obstructive sleep apnoea secondary to temporomandibular joint ankylosis.

Aim

We present a case of temporomandibular joint ankylosis with retrognathia and obstructive sleep apnoea that was managed successfully with distraction osteogenesis.

Methods

A 12 year old female presented with the complaint of reduced mouth opening, retruded chin and difficulty in breathing and was diagnosed with bilateral temporomandibular joint ankylosis with retrognathia and obstructive sleep apnoea. Treatment done in two phases, first, distraction osteogenesis to correct the retrognathia and obstructive sleep apnoea followed by bilateral temporomandibular joint ankylosis release and ramus-condyle unit reconstruction with costo-chondral graft. Outcomes was assessed and evaluated for posterior airway space by lateral cephalogram analysis (in mm), for retrognathia by p- cephalogram, lateral cephalogram and orthopantomogram analysis (in mm) and for aesthetics satisfaction by numerical rating scale (0 to 10, 0 for least satisfied and 10 for most satisfied).

Results

3 month post-operatively mouth opening improved by 21 mm (from nil to 21 mm), mandibular advancement (retrognathia correction) by 27 mm (body-13 mm, ramus-15 mm), posterior airway space improvement by 7–8 mm, and esthetic satisfaction score is 8.

Conclusion

Distraction osteogenesis is a favourable treatment modality for correction of retrognathia and obstructive sleep apnoea and when supplemented by temporomandibular joint ankylosis release and ramus-condyle unit reconstruction with costo-chondral graft gives optimum results for management of temporomandibular joint ankylosis.

Abstract No: 0966

AMO combined with subapical osteotomy-2 case reports

Dr. Prerana

Kamini Institute of Dental Sciences

Abstract

Orthognathic surgery is performed to alter the shape of the jaws to improve facial aesthetics and occlusion. The anterior segmental maxillary osteotomy was first published by Cohn Stock in 1921. It is indicated for vertical or sagittal development of maxillary alveolar

process in patients where posterior teeth relationship is acceptable. Anterior mandibular subapical osteotomy is done to correct the anterior open bite and to advance or retrude anterior lower segment.

Abstract No: 0972

Algorithm followed in bi-jaw surgery

Dr. Deepak Shukla

Army Dental Center (R&R)

Abstract

Bi-jaw surgery is advocated for the management of dentofacial deformities involving both jaws in order to get a stable dental occlusion and harmony in facial esthetics. It requires a multidisciplinary approach and close integration between orthodontics and oral and maxillofacial surgery. The surgery is planned and executed in phases. Phase i (preoperative) step-1: the preoperative preparation with a complete clinical radiological and anthropometric assessment with formation of sto & vto. Phase ii (surgical) step 1: conventional lefort i osteotomy with mobilization of the maxilla along with planned vector and functionally stable fixation utilizing interim splint. Step 2: bilateral sagittal split osteotomy and mobilizing the mandible along with planned vector and functionally stable fixation utilizing the final splint. Phase iii (post operative care) with supportive therapy of postoperative antibiotic and analgesic with oral hygiene care.

Abstract No: 0975

Orthognathic surgery for facial transformation - Case Series

Dr. Ashish Uppal, Dr. Gaurav Singh, Dr. Madan Mishra

Sardar Patel Post Graduate Institute of Dental and Medical Sciences

Abstract

Background

The past decade has seen a tremendous surge in orthognathic surgery and, as dentists become more and more aware of its benefits, its utilization is certain to roar. No longer do the patients shudder at the thought of surgical intervention in behalf of malocclusion or esthetics, but actively seek such services from oral surgeons, plastic surgeons, and orthodontists. Patients often sidestep normal referral channels and on their own initiative, directly seek consultation for such services.

Objectives

The aim of this case series is to report the outcome of various maxillary and mandibular orthognathic surgeries for correction of jaw deformities.

Methods

Total 20 patients with various maxillomandibular deformities were operated following standard operative protocol for orthognathic surgery followed at our centre. The various orthognathic procedures performed were le fort I osteotomy, anterior maxillary osteotomy, lower anterior subapical osteotomy and bilateral sagittal split osteotomy.

Result

Optimal jaw relations were achieved with improvement in the aesthetics in all the cases. The results were stable after a minimum 2 year follow up period of each case. Conclusion jaw deformities have been recognized and described for centuries, but the challenge to correct them surgically was not met until the turn of the century. With proper planning, execution, and follow-up care, it is possible to reposition the maxilla and mandible to correct the anteroposterior, vertical and horizontal discrepancies in order to improve facial aesthetics.

References

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Abstract No: 1025

Osteodistractor: A Digitalized Metamorphosis

Dr. Anoop Unnikrishnan K S, Dr Prashant Pandilwar, Dr Kanchan Shah, Dr Mahesh Sanap, Dr Kainat Khan

Government Dental College and Hospital Aurangabad

Abstract

Aim

The goal of the study is to assess the effectiveness of CAD/CAM in craniofacial anomalies and reconstruction treated by distraction osteogenesis.

Materials and methods

3 patients with dentofacial anomalies were posted for surgical correction using distraction osteogenesis. Stereolithographic models were custom fabricated and surgical correction was planned preoperatively for osteotomy cuts and pin positioning with the help of models.

Result

The combination of these tools minimized the amount of time spent intraoperatively, increased operative safety and improved precision of osteotomies sites and distraction vectors.

Conclusion

Reconstruction by distraction osteogenesis allows bone and soft tissues to be simultaneously regenerated. Surgical osteotomies are pre-planned and rapidly performed using cutting guide. Precise placement of distraction device was achieved. The surgery resulted in outcome predicted by computer assisted planning.

Abstract No: 1027

Role of Onlay Grafting in Orthognathic Surgery

Dr. Nithin V M

KVG Dental College and Hospital, Sullia

Abstract

Background

Skeletal class III mal-occlusion is characterised by mandibular prognathism or retrognathism. Few cases can also be associated with perinasal/malar deficiency. Various onlay bone grafts are used in

orthognathic surgeries such as autogenous symphysis, medial ramus, iliac cortico cancelous bone grafts or alloplastic bone grafts. Hereby presenting a poster of a female patient named kairunisa reported to department of OMFS, kvg dental college, sullia with skeletal class III malocclusion with mandibular prognathism along with a perinasal deficiency which was successfully treated as a surgery first approach by uni-jaw surgery with onlay perinasal alloplastic grafting.

Objective

Objective is to improve the perinasal deficiency by an alloplastic onlay bone graft as an alternative to maxillary advancement (high lefort I advancement) to treat perinasal deficiency. Method: using an intraoral vestibular incision bilaterally and mucoperiosteal flap reflection, perinasal grafting is done to improve the perinasal deficiency by using a bio oss onlay graft material and bssso with setback of mandible to treat mandibular prognathism.

Finding

Adequate perinasal fullness is achieved by grafting as an alternative, less invasive procedure thereby avoiding bimaxillary surgery.

Conclusion

Conventional treatment for skeletal class III malocclusion with mandibular prognathism and perinasal deficiency is bssso with setback followed by high lefort I osteotomy with maxillary advancement. Perinasal grafting is less invasive newer technique done to avoid maxillary orthognathic surgery but the disadvantage of it is expensive and palpable bony mass if the graft is not placed in appropriate thickness.

Abstract No: 1044

Corpus Angle Mandibular Osteotomy

Dr. Sreelatha Sadasivan

KMCT Dental College

Abstract

Introduction

Asymmetric variations of the contralateral structures of the head and face occur commonly in the general population and are an accepted feature of morphogenesis. A gross asymmetry characterized by marked unilateral overdevelopment of hard and soft tissues of head and face is a rare congenital malformation and has been termed as hemifacial hypertrophy. Objective to illustrate a treatment methodology of hemifacial hypertrophy using new combined procedure involving corpus angle V line mandibular osteotomy.

Case report

A patient reported to our department with complaint of growing asymmetry of the face and a deviated chin to one side since 5 years. The patient was diagnosed with hemifacial hypertrophy. Procedure lateral cephalometric tracing and burstone analysis to plan the surgery. enbloc mandibular corpus ostectomy from mandibular ramus to mental foramen was done with an oscillating saw in anterior half and contra-angled handpiece in posterior half.

Discussion

Hemihypertrophy was reported first by wagner in 1839 and classified by rowe in 1962. men are commonly affected than women. The treatment is surgical. Corpus angle v line osteotomy of mandible was developed by toshitsugu hirohi and kotaro yoshimura.

Result

Bilateral symmetry of mandible was achieved as planned.

Conclusion

Asymmetry is one of the most unusual and interesting errors of human reproduction. Hemifacial hypertrophy is one among them and

can be seen either isolated or associated with syndromes. The technique used was done to overcome the major drawbacks of conventional procedures such as limited access and difficulty in controlling blind osteotomy.

Abstract No: 1136

Pseudoaneurysm of Posterior Superior Alveolar Artery: An Unusual Sequelae of Le Fort I Osteotomy

Dr. Sruthi P K, Dr. Manoj Kumar KP

KMCT Dental College, Mampetta, Manassery, Mukkam, Calicut

Abstract

Case report

A clinical case described about late development of pseudoaneurysm in posterior superior alveolar artery in a 26-year-old patient who had undergone leforti osteotomy along with augmentation genioplasty. 6 weeks later, he reported with the mild swelling & pain on right side of nose and below the right eye & was prescribed antibiotics and analgesics with which he showed no signs of relief. Around the 8th postoperative week, he again reported with episode of epistaxis which was controlled by anterior and posterior nasal packing. The bleeding recurred 11th week after surgery; thus, vascular anatomy in the pterygomaxillary area is reviewed, pseudoaneurysm was diagnosed on selective carotid angiography and successfully treated by embolization; and 2-year follow up was uneventful.

Discussion

Although the osteotome is positioned in close vicinity to the maxillary artery and its branches during pterygomaxillary separation in a Le Fort I osteotomy, pseudoaneurysm of the external carotid artery (eca) or one of its branches is rare. The relatively small size, deep and well protected, location of the maxillary artery contributes to the rare occurrence of post traumatic pseudo aneurysms in this vessel.

Clinical presentation is most often unilateral posterior epistaxis refractory to conservative treatment, happening from 5 h to even 11 weeks after surgery. Any patient who presents with the first episode of epistaxis after the second postoperative week, or who experiences recurrent significant haemorrhage following orthognathic surgery, should be investigated by angiography to rule out a pa. Pseudoaneurysm of deep branches of the internal maxillary artery are often better treated with embolization. Embolization may obliterate the exact bleeding source and spare more proximal vessels.

Conclusion

This report reaffirms the importance of maintaining a high clinical suspicion for pseudoaneurysm as a possible etiology of delayed postoperative bleeding in patients after craniomaxillofacial surgery.

Abstract No: 1140

Otoplasty

Dr. Mohammad.Naffizuddin

DRS Sudha & Nageswara Rao Institute of Dental Sciences

Abstract

Malformations of the auricle are common, occurring in 1 in 12,500 births. They can occur alone or in combination with a syndrome affecting the head and neck structures. Otoplasty denotes surgical and non surgical procedures for correcting the deformities and the defects

of the pinna, and for reconstructing a defective or deformed pinna or absent external ear, consequent to congenital conditions and trauma. This poster describes the surgical techniques and complications of otoplasty.

Abstract No: 1145

Swift Esthetics

Dr. Dwarapudi Jayarama Chandra

Drs. Sudha and Nageswara Rao Siddhartha Institute of Dental Sciences, Gannavaram

Abstract

In surgery first approach for orthognathic surgery presurgical orthodontic phase is eliminated, jaws are surgically repositioned in desired position and after that orthodontic tooth movement follows.- compared with conventional approaches to the orthognathic surgery “surgery first” protocols could be advantageous interms of shortened treatment times and immediate esthetic improvement. In this poster I would like to describe the patient selection advantages and disadvantages of “surgery first approach”.

Abstract No: 1182

Evaluating accuracy of imaging software in predicting tissue changes

Dr. Yamini Janardhan

Al Badar Rural Dental College and Hospital

Abstract

Background

Orthognathic surgery planning has taken a leap from traditional acetate tracings to modern computer-aided tracings.

Aims & objectives

The study was done to evaluate the accuracy of imaging software in predicting the hard and soft tissue changes in orthognathic surgery.

Objectives

To compare post-operative cephalometric values with pre-operative software predictions values to evaluate changes in hard and soft tissues with cephalogram and 2D photogrammetry.

Material & methods

Pre-operative and post-operative (3 months after surgery) lateral cephalogram was digitized and traced using dolphin software to obtain hard and soft tissue cephalometric analysis. The pre-operative tracing was over laid on post-operative profile photograph of the patient and subjected to simulation as per the treatment plan to obtain a prediction analysis and image. The post-operative cephalometric values were compared with software prediction values. For clinical assessment, post-operative profile photographs were evaluated by 5 lay persons, 5 surgical patients, 5 maxillofacial surgeons who scored the photographs from 0 to 10 as per the changes noted postoperatively.

Results

For clinical assessment, it was noted that maxillofacial surgeons gave a mean score of 7.16 ± 0.81 compared to lay person s who gave a

mean score of 5.97 ± 0.67 and surgical patients who gave a mean score of 6.11 ± 0.67 .

Conclusions

This study concludes that imaging software is accurate in predicting the post-operative results in orthognathic surgery, and maxillofacial surgeons have better perception about post-surgical results compared to lay persons and surgical patients.

Abstract No: TR0708

Lefort III Distraction Osteogenesis

Dr. Dhanashree Pradeep Deshpande

A B Shetty Memorial Institute of Dental Sciences

Abstract

The hypoplastic midface in syndromic craniosynostosis often leads to functional and aesthetic problems including exophthalmos; inadequate closure of the eye lids and secondary exposure keratitis; upper airway obstruction that predisposes to complications such as respiratory infections, sleep apnoea, or pulmonale, neurological dysfunction, and brain damage; and serous otitis media and orthognathic problems. Several surgical techniques have been developed to advance the midface. Since Rene Le Fort I published his landmark studies on fractures of the human skull in 1901, the Le Fort classification has been generally accepted and shown to be indispensable in craniofacial surgery and the mobilization of the midface is also performed along these principles. The classic Le Fort III (lf III) osteotomy, derived from this classification and described by tessier, has been applied to craniofacial patients since 1967. Initially, Le Fort III osteotomy was limited to the correction of functional and aesthetic problems in patients with severe forms of craniofacial dysostosis (cfd) syndromes, mainly owing to the intra-operative strain and the probability of relapse and serious postoperative complications. The syndromic patients had to undergo numerous operations, in part because of inadequate skeletal advancements when the traditional techniques were used. After distraction osteogenesis had been introduced into craniomaxillofacial surgery by Mc Carthy et al. In 1992, considerably larger and safer skeletal advancements were feasible. In my poster i will be presenting about history, indications, surgical technique, complications and relapse with Le Fort III distraction osteogenesis.

Abstract No: TR2210

“Psychosis” an overlooked aspect of major corrective surgeries

Dr. Pradeep Kumar Das, Dr Rahul Kashyap Dr. Alok Bhatnagar

SGT Dental College, Gurgaon

Abstract

Background

The use of corticosteroids is an important component in the management of patients undergoing major corrective surgeries due to their potent anti-inflammatory actions. Short-term administration of corticosteroids is known to suppress the normal feedback mechanism of

the hypothalamic-pituitary- adrenal axis leading to some bizarre complications.

Objectives

To evaluate 2 patients with post-operative depressive psychosis after orthognathic surgery.

Methods

Two patients who underwent extensive orthognathic surgery and were put on short - term steroid therapy, developed clinical signs of depressive psychosis in the immediate post-op period. They required prolonged clinical psychology consultation. The steroid therapy was terminated and antipsychiatric drugs were started after 2nd and 3rd post-operative day respectively.

Result

Patients were well oriented after a week. Antipsychiatric drugs were stopped.

Conclusions

Short-term administration of corticosteroids is mandated in intra-operative and post-operative use in cases undergoing major surgical procedures and it is known to suppress the normal feedback mechanism of the hypothalamic-pituitary- adrenal axis other side effects of corticosteroid administration include alterations in mood, glaucoma, posterior subcapsular cataracts, hypertension, osteoporosis, glucose intolerance, peptic ulceration, impaired cell-mediated immunity. Continued administration of systemic corticosteroids in patients with these symptoms can aggravate their condition. However, a complete return of normal function shows to occur at the seventh post administration day.

Category – Reconstructive Surgery

Abstract No: 0164

Tri-flaps for reconstruction of extensive jacob's ulcer – a case report

Dr. Kala Bagavathy, Dr. I. Packiaraj, MDS Dr. Sherin A. Khalam, MDS

Rajas Dental College and Hospital

Abstract

Introduction – reconstruction of small facial defects has been successfully managed by local flaps. In contrast, larger defects pose a challenge, by necessitating free flaps. However, such large defects can be repaired using multiple local flaps which prove to be a viable and satisfactory alternative.

Case report – a 39 year old male patient underwent excision of a recurrent basal cell carcinoma lesion of 4*5 cm size, quadrilateral in shape, on the left ala of the nose, extending on to the dorsum, left infra orbital and malar regions along with a wide margin of normal tissue. Reconstruction of the resultant defect was done using multiple local flaps namely the paramedian forehead flap, the lateral cheek rotation flap & the platysma myocutaneous flap.

Discussion

Facial defects, resulting from tumor resection, can be effectively reconstructed with the correct choice of local flap. Local flaps are well perfused, easy to harvest and handle, provide optimal esthetic results due to good matching of the skin in terms of color, texture, hair bearing characteristics, and thickness.

Conclusion

This case throws light on the versatility of multiple local facial flaps for maxillofacial reconstruction.

References

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Abstract No: 0218

Scope of stereolithographic models in maxillo facial surgeries

Dr. Reju Sathar

AL Badar Rural Dental College

Abstract

Aims and Objectives

To assess the scope of the use of stereolithographic models in maxillofacial surgeries.

Materials and methods

Stereolithographic models were used in the treatment planning of maxillofacial surgical procedures performed in the department of oral maxillofacial surgery, al badar rural dental college and hospital. Specialized 3D stereolithographic models were ordered and utilized for surgical treatment of maxillo facial deformities. Mock surgeries were done on these stereolithographic models and surgical outcomes were predicted.

Results

The use of 3D stereolithographic models in maxillo facial surgeries significantly helped in treatment planning and predicting the clinical outcome. It also helped in preoperative three-dimensional visualization of surgical area and total operating time was reduced which had the benefit of decreasing the duration of ga and reducing wound exposure.

Conclusion

3D stereolithographic models are very effective in treatment planning and execution of maxillo facial surgeries.

Abstract No: 0284

Soft tissue reconstruction of carcinoma of the tongue

Dr. Shweta Shah

Modern Dental College Research Centre

Abstract

In today's time and age it is not uncommon to see patients suffering from carcinoma of the oral cavity particularly the tongue. The treatment of such carcinomas usually includes resection of the tumour up to the desired extent followed by reconstructing the resultant soft tissue defects. Smaller defects usually heal by secondary intention and primary closure but in a composite and relatively larger defect reconstruction is required. This is usually done by using full thickness or partial thickness skin grafts although free flaps remain mainstay. Recent studies and literature have suggested that novel regional flaps

have proven to be alternatives to free flaps. It is a complicated task which not only needs to fulfil the function but also the esthetics to a certain extent. Thus, detailed examination and investigations of the defect allows the surgeon to select the most appropriate reconstructive variant.

Abstract No: 0343
Reconstruction of mandibular condyle

Dr. Abhijith George

KVG Dental College and Hospital

Abstract

Objective is to illustrate various techniques, materials and methods in reconstruction of mandibular condyle the temporomandibular joint (TMJ) connects the mandibular condyle to the infratemporal fossa and is integral for speech, chewing, and swallowing. Indication for reconstruction include ankylosis, severe osteoarthritis, rheumatoid arthropathy, neoplastic disease, post-traumatic dysfunction, and congenital disease. The aims of reconstruction include the restoration of mandibular function and form, decreased patient disability and suffering, and the prevention of disease progression. The method of reconstruction, however, is controversial and a multitude of techniques both autogenous (fibula, metatarsal, clavicle, iliac, and costochondral) and alloplastic (acrylic, synthetic fibers, ulnar head prosthesis, compressible silicone rubber, and total joint systems) have been described. Developing an effective technique to substitute condyle with a suitable graft material is of paramount importance. This poster highlights the various techniques, methods and materials used in the reconstruction of condyle.

Abstract No: 0360
Collagen Membrane in Oral Submucous Fibrosis

Dr. Shaikh Sumayyah Almas Quraishi

Al-Ameen Dental College and Hospital

Abstract

Oral submucous fibrosis is a chronic insidious disease and is well recognized as a premalignant condition. It is a collagen related disorder characterized by progressive hyalinization of submucosa. The disease is mainly seen in Asian countries and its prevalence is more in India. Regular use of areca nut is the major etiological factor. Conservative management of this disorder includes stoppage of habit, nutritional supplements and local and systemic glucocorticoids. Surgical management includes resection of fibrotic bands and reconstruction with partial thickness skin or mucosal grafts. But these procedures require a donor site and complications leading to flap and graft morbidity are associated. To avoid these, graft materials like collagen membranes were introduced. The purpose of this case study was to observe the efficacy of collagen membrane as a biodegradable dressing material in osmf. Here, we are presenting a case.

A case of: OSMF in a young healthy adult male patient, aged 18 years whose chief complaint was inability to open his mouth completely. Mouth opening was recorded as 1.5 cm pre-operatively and he underwent surgery in which bilateral fibrous bands were resected

and collagen membrane measuring 10*10 cm was used as dressing material. Intra-operative mouth opening was 4 cm and 1 month post-operative mouth opening was 3.8 cm. The nature of collagen membrane was found to be a very suitable alternate to other flaps used in osmf as post-operatively there were no complications and collagen membrane also helped in post-operative haemostasis, pain control and rapid healing.

References

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2. Two wound-covering materials in the surgical treatment of oral submucous fibrosis: a clinical comparison [https://doi.org/10.1016/s2212-4268\(12\)60004-9](https://doi.org/10.1016/s2212-4268(12)60004-9).

Abstract No: 0400
Reconstruction of hemi-maxillectomy defect using temporal artery based flaps: a case report

Dr. Shiju Mathew Jacob

Army Dental Centre (Research & Referral)

Abstract
Introduction

The vascular anatomy of the temporoparietal fascial and temporalis muscle supports various reconstructive needs for the oral and maxillofacial surgeon. The dependable blood supply through the middle and deep temporal arteries, proximity to the maxillofacial region; possibility to mobilize it to the oral cavity through the under surface of zygomatic arch and its fanned out nature permits the surgeon to use this flap for the reconstruction of oral cavity, ear and orbit.

Case report: A 60 year old male patient was referred to our department by the ophthalmologist for correction of hypoglobus. The patient complained of discharge of fluids from the corner of the left eye. On eliciting the past history the individual was an operated case of squamous cell carcinoma with a hemi-maxillary defect on the left side. He had also undergone adjuvant radiotherapy and presently using a definitive obturator. He was taken up for orbital floor reconstruction with a titanium orbital mesh. However 6 months post-surgery he reported back with implant exposure in the infra-orbital region. Attempts at primary closure were futile because of the poor vascularity of the skin in the previously irradiated region. He was then taken up for definitive reconstruction with temporal muscle and temporo-parietal fascia flap to reconstruct the orbital floor and obliteration of the hemi-maxillary defect. Post-operative recovery was uneventful.

Conclusion

The temporal region is a good donor site because of rich vascular network and availability of different tissues-skin, fascia, muscle, galea, calvarial bone and pericranium. Thus, one or more tissues can be harvested depending upon the defect site and nature. The better understanding of the surgical anatomy of this region offers us a suitable alternative to free flaps for maxillary defects.

Abstract No: 0408**Assessment & application of virtual planning in facial asymmetry**

Dr. Himaja Idupulapati, Dr Vivek N MDS (Professor & HOD) Dr Saravanan C FDSRCS (Professor) Dr Karthik R MDS (Reader)

SRM Kattankulathur Dental College & Hospital

Abstract**Background**

Facial asymmetry is an lopsided irregularity may affect the physical and psychological well-being of the patient. Correction of these deformities adds to exponential increase in the self-esteem of the patient. In most cases the options for reconstruction are extremely complex and involves either autogenous grafts or distraction osteogenesis. Soft tissue defects are usually camouflaged with fat grafting. Reconstructive options for larger defects are often limited. The recent advances in clinical imaging, 3D printing and the increasing availability of bio-compatible allografts which can be designed and printed are gaining popularity.

Objective/Purpose

The purpose was to determine the clinical feasibility of visualization of the defect using the 3D models and reconstruction with biocompatible printable alloplasts in order to avoid secondary surgical site and associated complications and achieve better outcomes.

Methods

The concept of using 3D technology in facial reconstruction has multiple advantages. Primarily, the ideal final aesthetic outcome can be simulated by virtual reconstruction. Use of 3D scanning has the of reliable visualization of the soft and hard tissue deficit. With the help of biomaterials like polyethylene comes the ability to modify and customize on the 3D models and templates.it also offers reliable biocompatibility, desirable adaptability and scaling down of operating time.

Conclusion

This treatment option is easily accepted by patients for its technical advancement and eliminating donor site morbidity.

Abstract No: 0433**Oral mucosal reconstruction in osmf with buccal fat pad**

Dr. Anjali Sudhakaran, Dr. Ravi V.(HOD and Professor), Dr. Shyamsunder M.(Professor), Dr. Girisanter, Dr. Jaeson Mohanan Painatt

Amrita Institute of Medical Sciences, Kochi

Abstract

Oral submucous fibrosis (OSMF) is a chronic, progressive, precancerous condition of oral mucosa, oropharynx and rarely larynx. Patients with osmf present with difficulty in opening their mouth and intolerance to hot and spicy food, which is caused by the formation of submucosal fibrotic bands. In its early stages osmf is treated with

intralesional steroid and hyaluronidase injections, antioxidants, vitamins and iron supplements, and placental extracts. Surgery being the only option available for advanced stages of osmf, the most widely accepted modality is the resection of the fibrotic bands and reconstruction of the defect. The buccal fat pad was first described by Bichat in 1802. It is a specialized fatty tissue, which has a rich blood supply. It epithelialises within a period of 2–3 weeks and has various advantages over other free flaps in being simple, equally effective, can be harvested through the same incision and has excellent functional outcomes. This case report presents a case of osmf which was treated with resection of the fibrous bands and coronoidectomy, followed by reconstruction with buccal fat pad and collagen membrane as a dressing. Following surgery, we were able to achieve complete healing in 8–10 days and full mouth opening. We find buccal fat pad gives an excellent clinical and surgical outcome compared to other free grafts.

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Abstract No: 0456**Laser speckle technique – a prodigy in free flap monitoring**

Dr. Sulagna Pal

Bapuji Dental College and Hospital, Davangere

Abstract

Free flaps are often used in the reconstruction of defects in the head and neck. For survival of the flap in the early phase of healing, the maintenance of good tissue perfusion and prompt recognition of any vascular compromise are essential before irreversible changes occur. There are mainly two types of flap monitoring methods, one being clinical and the other being advanced methods like doppler, infrared imaging, laser imaging. Other techniques include micro dialysis to monitor concentrations of glucose and lactate in flap. The most common clinical method for monitoring flap microcirculation is observation of skin colour, temperature, capillary refill and swelling with naked eye. The laser speckle technique measures tissue perfusion by visualizing patterns of laser light scatter from circulatory erythrocytes. It is easy to use and interpret and it reassures as it provides real time images of perfusion. Coagulation parameters can also be a reliable, accurate and easily interpretable monitoring method for patients with flap compromise. Literature says that the values of d dimer and fib are significantly higher in patients with successful free flaps. Thus it can be concluded that free flap monitoring is an essential arm of peri and post-operative surveillance to prevent flap necrosis and failure at an early stage. Time is of essence in maintaining flap vitality and hence competent flap monitoring using laser speckle technique determines the state and area of a failing flap and that helps in timely intervention by re exploration or salvage procedures.

Abstract No: 0469
Versatility of Dermis Fat Graft

Dr. Sadhana Jayanth Perumal, Dr Iqbal Hossain

Army Dental Centre (R&R)

Abstract

Background/introduction

fat grafts have been used for many years for many surgical applications. These include filling depressed scars, hemifacial progressive atrophy, cosmetic enhancement of the ageing face, to correct parotid bed defects, as inter-positional material in gap arthroplasty, to obliterate the frontal sinus and also as a free graft post fibrotomy in oral submucous fibrosis(OSMF).

Objectives

To review the success of dermis fat graft (DFG) in treatment of ankylosis, frontal bone fractures and osmf with a series of cases operated in the department of oral and maxillofacial surgery, army dental centre(r&r) from jun 2016- may 2018.

Methods

A series of five cases of TMJ ankylosis were taken up for gap arthroplasty with dfg as the inter-positional material. Two cases of osmf were treated by fibrotomy followed by placement of dfg to cover the defect. Dfg was used to obliterate the frontal sinus in treatment of frontal bone fracture in two patients. Post-op all patients were recalled for routine follow-up.

Results

All five cases of ankylosis reported improvement in interincisal opening with average being 31.5 mm. Patients of OSMF also showed positive results and improvement in mouth opening. Cases of frontal bone fracture also exhibited healing with no complications.

Conclusions

Dermis fat grafting is a predictable surgical technique that allows the maxillofacial surgeon access to autologous graft material which is ideal for multiple facial procedures. Minimal morbidity and ideal graft material qualities will enable DFG to continue to be the standard upon which all filler materials are compared.

Abstract No: 0524
Autogenous Bone Grafts in OMFS

Dr. Ravada Venkata Ramana

Drs Sudha & Nageswararao Siddhartha Institute of Dental Sciences

Abstract

Maxillofacial surgery deals with major surgery of jaw bone tumor, oral cancers, temporomandibular joint, congenital facial defects, jaw bone fracture etc. This branch of surgery has come up more recently with advanced surgical technique and bone grafting has become a regular job for maxillofacial surgeons in the reconstruction of acquired or congenital jaw defect. The term grafts apply to the transplantation of living tissues and implant means transplantation of nonviable tissues. Besides microvascular flap with bone may be grafted anastomosing with vessels. Numerous attempts have been made for a long time to employ these procedures in the reconstruction of the jaw after oncological surgery, destruction of a bone by accident, congenital defects, in the treatment of jaw deformity, tm joint abnormalities. Various types of bone grafts, such as xenogenic bone grafts, autogenic bone grafts, allogenic bone have been successfully

transplanted from time to time by some authors. However, the success of bone grafting is still a challenging issue in the maxillofacial surgery.

Abstract No: 0539
Virtual surgical planning for inferior alveolar nerve reconstruction

Dr. Gudala Ambedhkar

Government Dental College and Hospital, Vijayawada

Abstract

The goals of reconstruction after ablative mandibular surgery include functional and esthetic restoration of the maxillofacial complex. Before microvascular reconstructive techniques the primary reconstruction options include non-vascularized hard and soft tissue reconstruction procedures. Current advances in surgical techniques as well as imaging and virtual surgical planning (VSP) permit excellent individual reconstruction with accuracy and precision. Despite these surgical and technological advances most reconstructive surgical procedures after ablative mandibular resection fail to address the neurosensory consequences, thereby failing to address complete reconstruction. Hence in this poster I would like to present the immediate ian reconstruction during the vsp session, performed with excellent outcomes without the need for additional micro neurosurgical expertise.

Abstract No: 0566
Ear reconstruction surgery- a psychosocial up- bringing for microtia patients

Dr. Naman Pandya

Ahmedabad Dental College and Hospital

Abstract

Congenital malformations of the external ear are uncommon birth defects with long-term sequelae for children and their families. The impact of such deformities on the patient can be both physical and emotional. More often school-aged children may be the object of teasing and ridicule. Auricular malformations range from anotia to mild alterations in the external form of the ear. But with the advanced surgical and audiological rehabilitation knowledge can improve and benefit patients. Surgery is requested by two main groups of patients: those who have an underdeveloped ear at birth (a condition known as microtia) and those who have lost a normal ear through trauma, disease or accident. The ear reconstruction process happens in two stages, about 6–12 months apart. A new era in ear reconstruction began in 1959 when Tanzer introduced his multistage autologous rib cartilage technique. Since then, modifications have been made to the original technique of Tanzer, mainly by Brent and then Nagata, to improve aesthetic results and decrease complication rates. The autologous rib cartilage graft has gained wide acceptance by surgeons; however, some other methods have been devised for auricular reconstruction including prosthetic and implant reconstruction, among others.

Abstract No: 0587
Free Fibular Composite Graft for Mandibular Reconstruction in Gunshot Injuries

Dr. Kurupati Krishna Lohitha

CKS Theja College of Dental Sciences and Resarch

Abstract

Despite many advances in reconstructive surgery, the reconstruction of composite mandibular defects, even today remains a formidable challenge to many of us. It is one of the few areas, where precision in preoperative planning and technical execution is vastly important. Microsurgical reconstruction has become one of the greatest advances in reconstruction of maxillofacial region. High energy, self-inflicting submental gunshot wounds resulting in considerable bone and soft tissue loss, requiring reconstruction of large portions of lower lip and mandible. Tissue necrosis, infection and hematoma formation have traditionally complicated attempts of primary repair, resulting in need for serial debridement and delayed bony reconstruction. Because of the extensive nature of injuries, free tissue transfer has become the standard for definitive repair, incorporating vascularised bone and soft tissue into the injury to minimise scar contracture and optimise post op function and cosmesis. For this purpose, free fibular flaps, based on peroneal vessels has gained maximum popularity. The fibula is largest expandable bone providing up to 25cms of tubular corticocancellous bone of excellent quality with long vascular pedicle. Thus, it has become workhorse donor site for reconstruction of mandible.

Abstract No: 0613
Gold standard surgical management of oral cancer... a case report

Dr. Susmriti Dey

Rama Dental College Hospital and Research Centre

Abstract

Introduction

Squamous cell carcinoma is a disease of the elderly men usually detected in 6th-7th decade of life and often preceded by precancerous lesions. If cancers originating from the buccal mucosa invade adjacent anatomical structures, surgical tumor resection becomes more challenging, thus raising specific considerations for reconstruction relative to the extent of resection. Fibular flaps are the preferred method for reconstruction of composite lateral mandibular defects. It is a vascularized free composite flap containing bone and muscles, with or without skin and provides reliable single-stage reconstruction with excellent functional and aesthetic results. Other vascularized bone flap used in the head and neck include iliac crest, scapula and radial forearm flaps.

Material and Method

Here we are presenting a case report of a 40 years old patient with squamous cell carcinoma of left buccal mucosa and gingivobuccal sulcus with involvement of retromolar trigone. The patient was operated by segmental mandibulectomy where a lower midline lip split incision was made, governed by the extent of lesion. Modified

neck dissection type II was performed by modified Schobinger incision and the defect was reconstructed with vascularized free fibula flap.

Conclusion

We hereby conclude that free fibula flap provides a best donor site of reconstructing the mandible (lateral, central or whole mandible) with low incidence of complication rates and good quality and quantity of bone stock to reconstruct defects in head and neck region. It also favours prosthetic rehabilitation and always the first choice for the majority of mandibular reconstruction cases.

Abstract No: 0656
Materials used in Reconstructive Rhinoplasty

Dr. Aishwarya R

Government Dental College, Kottayam

Abstract

Background

Rhinoplasty is a surgical procedure for correcting the form, restoring the functions and enhancing the aesthetic appeal of nose. It is done for correcting the deformities due to trauma, congenital malformation, respiratory obstruction or after a failed rhinoplasty. The history of rhinoplasty in India dates back to as early as 800 BC where Sushruta describes forehead flap rhinoplasty.

Aim

The aim of this poster is to bring out the various materials available for reconstructive rhinoplasty, their specific indications, advantages and disadvantages.

Objectives

1-discuss the autologous materials like cartilage, fat and bone 2-bring out the viability of cadaveric cartilage 3-discuss the various alloplastic materials ranging from silicone implants to newer ones like Gore-Tex and Medpor.

Conclusion

The chief goal in reconstructive rhinoplasty is to understand the patient's concerns and to do a critical evaluation to enable realistic reconstruction. The key procedure is to bring out the desired contour of the nose along with replacing the lost soft tissue volume. Having thorough knowledge of these materials will enable the surgeon to use them for desired results.

Abstract No: 0660
Radial forearm free flap in reconstruction of defects in oral and maxillofacial region

Dr. Malay Kanti Bachhar

Dr. R Ahmed Dental College & Hospital

Abstract

Reconstruction means to restore form and function and totally rehabilitate the patient. The efforts necessary require reconstruction of anatomic defects created by ablative surgery to restore esthetic

appearance and physiologic function. Radial forearm free flap is one of the most used flap in reconstruction of orofacial defects. In my e-poster I will show two cases of reconstruction in maxillofacial region by using rfff. one is verrucous carcinoma of oral commissure and another is of squamous cell carcinoma of tongue. The radial forearm flap is a viable reconstructive option for tongue defects. there is acceptable form and functional restoration with minimal donor site morbidity.

Abstract No: 0768

Microlipoinjection - a method of head and neck reconstruction - a review

Dr. Prathibha Prakash

Government Dental College Kottayam

Abstract

Background: fatty tissue is found to have regenerative properties due to adipose derived mesenchymal stem cells. So it can be used as a natural material to reconstruct head and neck area with minimal reactions and trauma to other areas.

Aim

To confirm its efficacy this review was done.

Method

Searches were done in pubmed and medscape using keyword microlipoinjection, autologous fat injection face.

Results

The microlipoinjection documented less severe complications. Fat atrophy is the most reported complication 2 percent.

Conclusion

This method can be used for scar revision, correction of minor defects in the jawline, elimination of frown lines, repair of sequelae of head and neck carcinoma and treatment of post parotidectomy frey syndrome. It increases the elasticity and tissue quality of that area. Complications are rare and it gives good aesthetic and functional improvement.

References

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2. Cook T, Shori N et al. facial recomputing with autologous fat. Facial plastic surgery 2004;20:145–147.

Abstract No: 0875

Reconstruction of an extensive post-excision defect using two flaps: a case report

Dr. Saatvik Shandilya, Dr. Sujata Mohanty

Maulana Azad Institute of Dental Sciences

Abstract

Background and overview reconstruction of maxillofacial defects after surgical excision represents one of the greatest challenges in head and neck surgery. Several techniques have been proposed in

order to achieve adequate functional and aesthetic results. Case description we present here a case of post-traumatic chronic suppurative osteomyelitis involving left body of mandible with multiple extraoral draining sinuses in the overlying necrotic skin. The condition was refractory to any antibiotic treatment for over 2 years and was being treated elsewhere. After complete evaluation, left hemimandibulectomy, excision of necrotic tissue and reconstruction with recon plate was done. The resultant soft tissue defect was reconstructed using a pedicled occipital flap based on occipital artery perforators, which was subsequently divided 3 weeks postoperatively. Intra-oral dehiscence and recon plate exposure was noted during the course of follow-up, which was covered using a delayed deltopectoral flap inserted through a transcutaneous tunnel, 2 months after the first surgery. Donor sites for both flaps were covered with split thickness skin grafts at the respective time of harvesting. Results 3 months after the inset, the occipital flap showed complete integration at the recipient site with good aesthetic appearance and adequate coverage. The intraoral portion of the deltopectoral flap also provided complete coverage of exposed recon plate intraorally without any significant complications. No morbidities were observed at any of the donor sites which healed uneventfully.

Abstract No: 0898

Use of Abbe- Estlander flaps for upper lip reconstruction

Dr. S. Vijayakanth

HPGDC Shimla

Abstract

Use of Abbe- Estlander flaps for upper lip reconstruction abstract the management of the lip defects remains a significant reconstructive challenge, requiring meticulous preoperative planning and surgical techniques to optimize the functional and cosmetic outcome. Defects may result from trauma, malignancy, and congenital disorders. The Abbe -Estlander flaps are axial pattern local flaps that transfer local tissue from the opposing lip based on an arterial pedicle from one of the labial arteries. Abbe flaps are the most commonly used flaps in the lip switch technique. The estlander flap is in essence, an abbe flap that is brought around the commissure. 45 year old male patient came to the department of oral and maxillofacial surgery H.P.G.D.C. Shimla, with an alleged history of road traffic accident on 2nd November 2018. On clinical and radiological examination, patient diagnosed as having fracture right orbito zygomatico maxillary complex, fracture left frontal bone and with two- third of upper lip defects. Patient was managed by orif and reconstruction of upper lip defect using abbe - estlander flaps done under general anesthesia. On 6 months follow up, patient having adequate mouth opening, but blunting of commissure noted. Blunting of commissure is a common complication associated with Estlander flap, but it progressively gets better over time. Abbe Estlander flap is a versatile flap for reconstruction of two-third upper lip defects with remarkable post operative aesthetic results and minimal complications.

Category – Reconstruction Surgeries

Abstract No: 0924

Contemporary role of pectoralis major myocutaneous flap: Wound Dehiscence Management

Dr. Shibani Rani Sarangi

Acific Dental College and Hospital

Abstract

The pectoralis major myocutaneous flap which was first described by Ariyan in 1979 is known widely as one of the most multifaceted and reliable flap, not only owing its beneficial role for one stage reconstruction in head and neck region but also for management of complex three-dimensional defects by modifying the flap, associated with minimal complications. Here, we report a case of 49 years old male patient having a chief complain of pain and swelling extra orally along with pus discharge from lower right side of mandible. Patient had habit of smoking since 25 years with a history of palliative radiotherapy for SCC 20 years back, with confirmatory diagnosis of chronic suppurative osteomyelitis. Initial surgical treatment included segmental resection of mandible which was stabilised using stainless steel recon plate followed by primary closure. On the seventh day postoperatively wound dehiscence occurred. Patient underwent through second surgery aspiring closure of defect with sternocleidomastoid flap, encountered again with wound dehiscence. Ultimately, pmmc flap was harvested that lead to closure of the defect with restoration of functions. Patient has been followed up with no fresh complains associated with the defect closure.

Keywords dehiscence, pectoralis major myocutaneous, reconstruction, palliative rt, chronic suppurative osteomyelitis, sternocleidomastoid presenter- Dr. shibani rani sarangi (IInd year postgraduate) pacific dental college, udaipur (rajasthan).

Abstract No: 0937

Dentigerous cyst in Paediatrics

Dr. KC Keerthana Sri

Vinayaka Mission Sankarachariyar Dental College

Abstract

Dentigerous cysts are most common cysts of the jaws affecting children's which comprises of about 14–20 per cent of all jaw cysts and are more frequent in males and common in the mandible. By definition, dentigerous cyst is attached to the cervix of an impacted tooth and results from proliferation of reduced enamel epithelium after formation of enamel. Clinical presentation of these cysts are either incidental, through routine radiographic examination or symptomatic i.e. When patients develop pain and swelling due to expansion of the cyst. Radiographically dentigerous cysts are radiolucent and usually unilocular, although large lesions occasionally show a scalloping multilocular pattern and associated with an

impacted or unerupted tooth. Treatment modality depends on factors like site of occurrence, cyst size, patient age, the dentition involved (redundant or potentially functioning tooth), and the involvement of vital structures. Specifically in children, the management differs due to growing nature of jaws, presence of mixed dentition and psychological reasons. Decompression of the cyst in growing children and adolescents is done to salvage the involved dentition. This poster highlights about the management of 4 cases of odontogenic cyst in children within the age range of 5–10 yrs occurring at different sites and the evidence of occlusal movement of the impacted tooth.

Abstract No: 0943

Malignant melanoma of oral cavity - a rare case report

Dr. Prasanth. S

Vinayaka Mission Sankarachariyar Dental College

Abstract

Malignant melanoma is a rare potentially aggressive tumor of melanocytic origin, accounting for 0.5% of all oral malignancy. It has tendency to metastasize and locally invade tissue more readily than any other malignant tumor of the oral cavity. It occurs approximately 4 times more frequently in oral mucosa of the upper jaw usually on the palate or alveolar gingiva. The chameleonic presentation of malignant melanoma, its asymptomatic condition, rarity of the lesion poor prognosis and the necessity of a highly specialized treatment are factors that should be seriously considered for management. Here in, we present such a rare and interesting case of oral malignant melanoma of the mandibular anterior region which was confirmed by immunohistochemistry and emphasizing the need to identify such lesions much earlier and report such cases to have regular follow up for further understanding of their aggressive biologic behavior.

Abstract No: 0997

Mandibular reconstruction with free fibular graft

Dr. Bitan Bhowmic

Sree Balaji Dental College & Hospital

Abstract

23 years old female patient comes to the department of oral and maxillofacial surgery of sbdc with chief complaints of pain and swelling for past 3 months with no difficulty in mouth opening. Opg reveals a large cystic lesion with displaced third molar near to the angle of mandible, resorption of first and second molar root were also seen. Incisional biopsy was done and report revealed plexiform ameloblastoma. Hemimandibulectomy was done and reconstruction with free fibula graft was carried out with post operative review for 10 months. Results: 12 month review was done which revealed no secondary changes in the operated area and graft intake was total successful with no fresh complaint from the patient and patient is being reviewed for delayed dental implant placement.

Abstract No: 1009**Versatility of nasolabial flap in management of post-radiation trismus***Dr. Makkena Radha Priya**CKS Theja Institute of Dental Sciences and Research***Abstract**

Nasolabial flap is a simple and versatile flap which can be successfully used for reconstructing small intraoral defects created after excision of malignant tumours and results in good overall functional and cosmetic outcome. The nasolabial flap may be superiorly or inferiorly based. An inferiorly based flap is useful in reconstruction of lip, oral commissures and anterior aspect of floor of mouth while superiorly based flaps are utilised for reconstruction of the ala and tip of nose, lower eyelids and cheek. The choice of the pedicle is based on the site of the defect and any need of rotation or advancement of tissue to the site of the defect. The flap may be thick or thin depending on the recruitment of the defect and the thickness of the donor tissues. An ipsilateral flap can cover small defects up to 2cms but if a larger defect of size approximately 5 cm or more is to be reconstructed a bilateral nasolabial flap can be utilised successfully. The flap has a good vascular supply. Hence survival is high with minimum donor defect and complications. The blood supply of the nasolabial flap is attributed mainly to the facial artery. Trismus is the common residual effect in oral cancer patients who receive surgery/radiotherapy with decreased mouth opening. Trismus impacts oral food intake, oral hygiene, deglutition, speech and increase risk of aspiration pneumonia. Side effects even extend to depression. High doses of radiation destroy cancer cells along with normal healthy cells in the localised area. Radiation causes fibrosis of oral mucosa leading to decreased mouth opening. Treatment of post radiation trismus using nasolabial flap gives good results in mouth opening.

Reference

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Abstract No: 1013**Patient Specific Implants***Dr. Nilesh Harbhambhai Odedra**Aswani Dental College & Research Centre***Abstract**

Introduction:-in the recent time, reconstruction of the craniofacial skeleton is extremely challenging when there is some of the critical factors that contribute to the complexity include anatomy, presence of vital structures adjacent to the affected part, uniqueness of each defect and chances of infection. Auto grafts are the gold standard for craniofacial skeletal reconstruction. However their use is limited by the availability of suitable donor site especially for large defects, tissue harvesting problems, donor site morbidity with an additional patient discomfort, chances of infection at both the recipient and donor sites, increased surgical time, resorption of the graft requiring secondary surgeries and the need for additionally skilled surgical team. So in that case, CAD-CAM systems and 3D modeling technology used for manufacturing a patient specific implants. For Patient specific

implants (PSI), 2 biocompatible materials are used: 1. peekoptima-It (polyetheretherketone) 2.commercially pure (CP) titanium.

Aims and Objectives

Accuracy of the PSI is better than the conventional bone grafting.

Materials and methods

A total 4 number of articles are initially search for review study.

Results

PSI has the benefit of better anatomic fit, reduced operating time, better strength, stability and biocompatibility, satisfying aesthetic results for surgeon and patient. Impact and fracture resistant for optimal protection of underlying structures. But PSI are not freely available yet, and expensive.

Conclusion

PSI has the unique ability to align implants to the patient's kinematic axis accurately and it's faster, more accurate and cost effective surgery bt none of these benefits have been realized so far.

Abstract No: 1015**Patient specific mandibular reconstruction using CAD/CAM - 3D Milled and Drilled***Dr. Mahesh Sonaji Sanap, Dr Prashant Pandilwar, Dr Kanchan Shah, Dr Kainat Khan, Dr Anoop Unnikrishnan**Government Dental College and Hospital Aurangabad***Abstract**

In the era of digital dentistry CAD/CAM has boon towards successful and predictable treatment outcomes. In field of oral and maxillofacial surgery CAD/CAM provides us many advances like stereolithographic models for mock surgeries, designing and developing of newer plates screws with 3D stability. Mandibular reconstruction has moved from simulation by dental model casts into an almost completely virtual environment CAD/CAM applications allow high level accuracy by providing a custom made template assisted contouring approach for reconstructing mandible and placement of implants.

Objective

The following case report demonstrates use of innovative computerized 3D milled and drilled customised for patient specific mandible crib and precludes potential deficiencies inherent to present reconstruction plate.

Method

Custom fabricated implant was used for 50 years old female patient with mandibular defect requiring reconstruction using CAD/CAM technology and metallic milling.

Result

Good esthetic results with good functional outcome were achieved initially. Later dehiscence of size 1.5 cm was noted postoperatively with implant exposure and managed by local wound care as implant was made at level of adjacent bone.

Background**Conclusion**

Inspite of complication, this custom made fabricated implant opened a new window that custom made metallic implants should be designed at level lower than that of adjacent bone.the metallic crib provides surgeon with an option to fill that crib with bone grafts thus providing bone for placement of implant thus helping us in achieving good functional outcome along with good esthetic results.

Abstract No: 1016**Rapid 3D wonders in oral and maxillofacial surgery: stereolithographic models**

Dr. Kainat Anwar Khan, Dr Prashant Pandilwar, Dr Kanchan Shah, Dr Anoop Unnikrishnan, Dr Mahesh Sanap

Government Dental College and Hospital Aurangabad

Abstract**Aim**

To assess the use and resultant outcome of stereolithographic models in oral and maxillofacial surgery.

Materials and methods

Patients with maxillofacial pathology to be posted for surgical correction were planned pre operatively for osteotomy cuts, pin positioning and contouring of reconstruction plates with the help of stereolithographic models using 3D CT or Magnetic Resonance Imaging (MRI) data.

Result

Stereolithographic models in oral and maxillofacial surgery aid in preoperative treatment planning and prevents significant loss of operation time, which includes decreased surgical time, decreased anesthesia time and decreased wound exposure duration. This increases comfort of surgeon and better post operative results are obtained.

Conclusion

Stereolithographic models in oral and maxillofacial surgery allows direct visualization of anatomic structures with high quality, designing of incisions, act as good education tool for patient, surgical guides simulating surgical procedures for producing and adapting biomaterials like plates, screws, prosthesis etc.

Abstract No: 1020**Transport disc distraction osteogenesis- a boon for innate mandibular reconstruction**

Dr. Taher Rupawala

AMC Dental College and Hospital Government Dental College and Hospital, RIMS, Kadapa

Abstract

Reconstruction of facial skeleton remains one of the most challenging surgical feat for the oral and maxillofacial surgeon owing to its impression as an arduous treatment modality demanding crucial surgical skills and post-operative care. Reconstruction of the facial skeleton assumes cardinal importance in face of surgical deformities of the mandible due to craniofacial syndromes, traumatically induced deformities, wide-spread infections, resection of benign or malignant tumours, postoperative deformity in oncology patients, etc. 1 transport disc distraction osteogenesis (TDDO) is a reconstructive modality for mandibular defect which has ability to promote growth in both soft and hard tissues, whereby a space or defect can be filled with bone by creating a 'transport disc' on one side of the defect, and advancing this disc gradually across the defect. The main goal of tddo is to employ the biological healing mechanisms in an attempt to create an anatomically correct regenerate that is better than external bone grafting or revascularized free-tissue transfer.2 this e poster describes a case report of 45-year-old female patient with diagnosis of ameloblastoma of right body of mandible measuring approximately

40x23x25 mm. Considering various treatment modalities as an option, we adopted for transport disc distraction osteogenesis (tddo) as a novel and viable treatment modality. The advantages-pitfalls-mishaps associated with it will be discussed.

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Abstract No: 1024**Autogenous iliac crest graft in mandibular reconstruction - a case report**

Dr. A. Mercy Hannah Rose

Government Dental College and Hospital, RIMS, Kadapa

Abstract

Mandibular reconstruction poses significant challenges to oral and maxillofacial surgeons. Several types of bone grafting are available for mandibular reconstruction including; non vascular autologous, allogenic and xenogenic bone, and vascularized free tissue transfer. Considering nonvascularized grafting options, autologous bone grafting has the ability to transfer osteocompetent cells to the recipient site for osteoid formation. The greatest volume and quality of osteocompetent cells can be harvested from cancellous bone within the iliac crest. The purpose of reconstruction for segmental defects is to provide mandibular continuity and dentoalveolar reconstruction. We are depicting a case report of recurrent keratocystic odontogenic tumor ['KOT'] in relation to left posterior mandible, treated by segmental resection and immediate reconstruction with autogenous nonvascular anterior iliac crest bone graft.

Abstract No: 1030**Eyelid reconstruction in trauma: forehead flap and mustardé cheek flap**

Dr. Shekhar S, Dr. Ravi, Dr. Shyamsunder

Amrita Institute of Medical Sciences

Abstract

Eyelids are complex structures, which form the protective mechanism of the eyes and pose a challenge for reconstruction. The eyelid defects are encountered in congenital anomalies, trauma, and post excision for neoplasm and may involve more than one area. We report the case of a 20 year old male with no known co-morbidities with an alleged history of Road traffic accident (RTA) sustaining head injury, facial injury and injury to the left upper chest. Avulsion laceration of the left eyebrow was seen with near total loss of upper and complete loss of lower eyelids. Levator palpebrae superioris, medial canthal and lateral canthal ligaments were completely avulsed. Total ophthalmoplegia

with subconjunctival hemorrhage and retro bulbar hemorrhage were also noted in the left eye. After clinical and radiographic examinations, he was diagnosed with multiple intracranial hemorrhages along with complex facial bone fractures including orbital blowout fracture with avulsion of upper and lower eyelids on the left side. He underwent open reduction and internal fixation of fracture segments followed by left upper and lower eyelid reconstruction with forehead flap and mustardé cheek flap respectively. Forehead flap division and realignment of mustardé cheek flap was performed after a period of 1 month. Knowledge of eyelid anatomy, adequate preoperative planning, and meticulous surgical technique will optimize the anatomical and functional result.

References

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Abstract No: 1065

Reconstruction of maxillofacial surgical defects using free fibula flap – a case series

Dr. Varsha Rajesh Gupta, Dr. Neelam N. Andrade

Nair Hospital Dental College

Abstract

Introduction

The maxilla and the mandible are major components of human facial appearance and have great contribution to the orofacial function. The mandible serves several important functions in the head and neck. The ultimate goal is restoration of both form and function, necessitating the evaluation of appearance, mastication, deglutition, speech, and oral competence. The reconstruction of the mandible is a complex procedure and continues to be a challenge in reconstructive cranio-maxillofacial plastic surgery. The post surgical reconstruction is of paramount importance with a graft that is viable and allows prosthetic rehabilitation. Indications for mandibular reconstruction are versatile, and include oncologic resections, traumatic injuries, and osteoradionecrosis. Hidalgo first reported the use of a fibula vascularized flap for mandibular reconstruction. The main advantage of free fibula flap is its ability to provide the largest bone length that allows reconstruction even after complete jaw resections. Vascularised free composite flap containing bone and muscle, with or without skin and provides reliable single-stage reconstruction with excellent functional and aesthetic results. 'Double-barreling' of the fibula can, for instance, enable enhanced aesthetic and functional results, as well as immediate one-stage osseointegrated dental implantation. Materials and method: so, presenting a case series of 5 cases to document our experience using the free vascularized fibular flap for comprehensive reconstruction of discontinuity defects in the maxilla and the mandible, after resections of benign odontogenic tumors. Results: all patients showed significant improvement in function and esthetics. Conclusion: it is a good choice to reconstruct maxillo-mandibular defect with free fibula flap as it is a reliable flap with low morbidity. It helps to get a better contour and good bone height which is suitable for future dental rehabilitation.

Abstract No: 1069

Gun shot injury reconstruction of mandible with microvascular flap

Dr. Khundrakpam Yaiphaba

Bangalore Institute of Dental Science

Abstract

Background

Gunshot injuries are rather serious but uncommon type of trauma. Oral and maxillofacial gunshot injuries are usually fatal due to close proximity with vital structure. Here we have two case reports, who had orofacial region exposed to gunshot injury.

Objective

The poster is aimed to show how microvascular flap (free fibula flap) can be used for reconstruction of mandible for gun shot injury.

Conclusion

Gun shot wounds may cause significant injuries and require proper levels of planning for associate surgeries. The use of free fibula flap in oral and maxillofacial surgery significantly improves clinical outcomes predictability in terms of esthetic, functional, and quality of life.

Abstract No: 1098

Post traumatic lower lip reconstruction - a surgical challenge

Dr. Prarthana Patel

Sri Aurobindo College of Dentistry and PG Institute

Abstract

Road traffic accidents comprise 93.3% of the maxillofacial injuries including hard and soft tissues. Such infected wounds require debridement followed by local or distant flaps for both therapeutic and aesthetic purposes. Post traumatic lip deformities present as a matter of functional and aesthetic concern to the patient with drooling of saliva and basic functional lip movements being the main problems faced by them. Reconstruction using naso-labial flaps provides the advantages in location, colour match, excellent blood supply, minimal donor deformity, absence of hair and ease of transfer. Other factors affecting choice of flap used for reconstruction include its ability to be modified as per the needs of the defect. Aesthetic suturing can also lead to minimal scarring at both donor and recipient sites. This poster presents a case of extensive soft tissue loss, secondary to trauma, involving three-fourth of the lower lip, commissure and reconstructed with a modified nasolabial flap.

Abstract No: 1128**Abdominal dermal fat graft in reconstruction of osmf. a case series**

Dr. Jaykishan A Solanki, Prof Shadab mohammad, Prof R K Singh, Prof Vibha Singh, Prof. Divya Mehrotra, Dr. Geeta Singh

King George's Medical University

Abstract**Background**

OSMF is chronic progressive fibrosing premalignant condition of oral cavity which is very common in south asian region of the world and in india mostly seen in northern india due to abuse of betel nut product. Various surgical and medical management were studied for its management.

Aims and objective

Surgical Management of OSMF (GRADE iii & iv Khanna jn, Andrade nn(1995)) in a group of 16 patient using abdominal dermal fat graft.

Material and method

16 patients were selected for surgery for osmf from the opd of department of oral and maxillofacial surgery of King George 's medical collage, Lucknow, Uttar Pradesh, India operated under g.a/l.a during June 2016 – january2018. Intraoral fibrous bands were dissected and mouth opening were achieved. Defect was reconstructed using abdominal dermal fat graft harvested from 3 cm below umbilicus with elliptical incision. Postoperative follow up were done regarding on parameters of mouth opening, pain, quality of life index for 1,3,6 month interval.

Result

Inter incisal mouth opening of 38–40 mm achieved post operatively. Quality of life improved on subsequent follow up.

Conclusion

Sufficient bulk can be obtained from abdominal region, thus making abdominal dermal fat graft a material of choice for reconstruction of osmf which prevent post operative fibrosis.

Abstract No: 1130**Transport distraction osteogenesis: A Treatment Modality for Anterior Mandibular Reconstruction**

Dr. Jay Taank

Hitkarini Dental College and Hospital

Abstract

Reconstruction of the facial skeleton remains a herculean task for a reconstructive surgeon, even with the availability of ample reconstructive options. Mandibular defects usually involve a combination of osseous and soft tissue deficiency and are among the most challenging problems in maxillofacial surgery transport distraction osteogenesis is a novel reconstructive modality with obvious advantages of osteogenesis and histogenesis from the residual host tissues and also, precludes donor site morbidity. The regenerate was clinically as hard as the adjacent unaffected mandible and radiologic evidence of bone regeneration was observed. The major advantage being regeneration of hard tissue and soft tissue components without the morbidity of donor site, so that functional rehabilitation of the patient is possible. The purpose of this study is to clinically evaluate the technique of transport distraction osteogenesis to reconstruct defects of the mandible using an indigenously made distraction device.

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Abstract No: 1143**DO-A review**

Dr. Anil Kumar Madigela

MNR Dental College

Abstract

Management of skeletal deformities in the maxillofacial region has been an important challenge for medicine and dentistry. Distraction osteogenesis uses the body's own repairing mechanism by simultaneous expansion of the functional soft tissue matrix for treating deficiencies of the craniofacial skeleton. This method has thus gained acceptance to be used as a comprehensive treatment approach for patients with skeletal insufficiencies. The primary aim of this poster is to summarize the information on do, thus contributing to its study, development, and application in challenging situations of our clinical practice as oral and maxillofacial surgeons.

Abstract No: TR 5936**Giant radicular cyst enucleation and reconstruction with native corticocancellous bone**

Dr. MC Chanchalesh

KMCT Dental College

Abstract

Radicular cysts are the most common odontogenic cystic lesions of inflammatory origin. It can become quite large because of its ability for significant expansion, extension into adjacent tissues and rapid growth.owing to its clinical characteristics similar to other more commonly occurring lesions in the oral cavity, differential diagnosis should include ameloblastoma, odontogenic keratocyst, periapical cementoma and pindborg tumour. Based on clinical, radiographical and histopathological findings, the present case was diagnosed as multiple giant radicular cyst. The clinical characteristics of this cyst could be considered as an interesting and unusual due to its giant nature. We are reporting a case of multiple giant radicular cyst in the right maxillary region crossing the midline, of a 57 year old male who reported to our department with a large swelling over palate, of 6 months duration, and whose opg showed a multilocular radiolucent area. Incisional biopsy was done and histopathological findings was suggestive of radicular cyst. Careful enucleation of cyst was performed along with extraction of associated teeth under general anesthesia. The defect formed as result of cyst enucleation is managed by reconstructing the alveolus using the bone attached to the teeth that

were removed as a part of the enucleation. the surgical defect was reconstructed using bone grafts from native site thus avoiding a secondary site bone harvesting. Regular follow up was done and the bone healing appeared satisfactory.

Category – Research New Technologies

Abstract No: 0159

A review on intracranial extension of massive skull base ameloblastoma and reconstruction using 3d printed dyes

Dr. Fatema Bootwala

A.B Shetty Memorial Institute of Dental Sciences

Abstract

Ameloblastoma is an aggressive, benign odontogenic tumor of epithelial origin. It comprises of about 1–3% of all odontogenic tumors in maxillofacial region. It is characterized by slow persistent growth, and is a locally aggressive infiltrative lesion. Radical surgical approach is the mainstay of treatment depending on the extent of the lesion and its histopathological behaviour. The purpose of this poster is to emphasize the importance of a radical approach for the excision of an ameloblastoma and the reconstruction of the defect using 3D printed dyes.

Abstract No: 0170

Application of stereolithography in oral and maxillofacial surgery

Dr. Najiya Allabaksh Nadaf, Dr. Sanjay Byakodi

Bharati Vidyapeeth Deemed to be University Dental College and Hospital, Sangli

Abstract

Background

Charles Hull in 1986 is credited with introducing his technological advance. The use began in the automobile industry for fabrication of polyurethane models and prototypes for various models, parts and tools. Subsequently, numerous advances in radiology and computer-aided manufacture (CAD–CAM) processes resulted in improved materials and accuracy. In the 1990 s, use of 3-d models began in the medical and surgical setting after the realization that models could reproduce anatomically accurate representations of a patient's hard tissue structures. About the poster: this poster is.

Aim

To explain a diverse range of clinical scenarios where 3-D stereolithographic models have been successfully utilized for maxillofacial reconstruction; the range of procedures includes trauma surgery, pathology induced defects, tissue engineering, complex TMJ reconstruction, and correction of complicated facial asymmetry cases. Advantages of the use of stereolithographic models: 1. Useful in the surgical planning of virtually any maxillofacial operation 2. Direct

simulation of osteotomies, grafts and the measurement of bone movements 3. Reduce intra-operative time and morbidity 4. Increase accuracy of the surgical reconstruction and minimize complications 5. Reduce surgeons' stress 6. Improved preoperative selection of implants and transplants 7. High informative value of sms for teaching and patient information 8. Documentation of unusual cases. Disadvantages: dimensional changes of models after sterilization.

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Abstract No: 0224

An alternative practical and safe scar therapy

Dr. Tharini S

Sri Ramachandra Dental College

Abstract

Wound healing after dermal injury is an imperfect process, inevitably leading to scar formation as the skin re – establishes its integrity. Keloids and hypertrophic scars can be uncomfortable, disfiguring and aesthetically undesirable. Common scar therapies include topical treatments, silicone, pressure therapy, corticosteroids, laser therapy, cryotherapy, radiation and revision surgery. The use of 5- fluorouracil in the treatment of scars appears to be a practical, safe and effective means of controlling scars in terms of both recurrence and symptoms. The purpose of this poster is to report the efficacy of 5-FU intralesionally in the treatment of inflamed hypertrophic scar.

Abstract No: 0242

Transport D.O.G

Dr. Ankita Kushwaha

A.B. Shetty Memorial Institute of Dental Sciences

Abstract

Reconstruction of the facial skeleton remains a challenging task for a reconstructive surgeon, even with the availability of ample reconstructive options. The maxillofacial region in particular, which is considered the major aesthetic highlight, poses complex reconstructive confront. This region remains important as it assists in speech, oral competence, mastication, deglutition, airway support, and maintains the facial projection. Therefore, its anatomic, functional, and aesthetic restoration following resective surgeries, trauma or congenital deformity. Transport distraction osteogenesis (tdog) is a novel reconstructive modality in the armamentarium of a maxillofacial reconstructive surgeon with obvious advantages of osteogenesis and histogenesis from the residual host tissues after tumor ablative

surgeries or trauma and also, precludes donor site morbidity. Transport distraction osteogenesis is the process whereby a space or defect can be filled with bone by creating a ‘transport disc’ on one side of the defect, and advancing this disc gradually across the defect. This disc leaves regenerated bone under the influence of tensional stress. Transport distraction osteogenesis is divided into three groups based on the number of distraction or compression sites as monofocal, bifocal and trifocal. Although TDOG seems a promising modality of reconstruction of maxillo-mandibular defects with excellent clinical results, it has the disadvantage of prolonged duration of treatment, follow up, and use of bulky transport devices. The future of bone transport relies on innovations that would accelerate mineralization of new bone regenerate and biomechanical developments in the device design.

Abstract No: 0336 Salivary pacemaker

Dr. Shubhra Jyoti, Dr. Manas De

Buddha Institute of Dental Science and Hospital

Abstract

Xerostomia is a common among adults, its incidence ranging from 10 to 20% of population and treating them has always been a clinical challenge for oral and maxillofacial surgeon. Neuro-electric stimulation offers a new pharmacological methods of treatment which overtakes the relevant role in therapeutic stimulation of saliva for patients requiring long term therapy.

Abstract No: 0368 The cutting edge in oral and maxillofacial surgery

Dr. Pratiksha Dwivedi

Institute of Dental Studies and Technoogy, Modinagar

Abstract

Background

Recent advancement in technology motivates clinicians to practice cutting edge tactics in the oral and maxillofacial surgery. the results provide patients with first-class medical services, reducing treatment morbidity and improving reconstruction within the head and neck in functional and esthetic aspects.

Objectives

The aim of the current review is to give an insight about the cutting edge developments in computer-assisted navigation system, 3-D stereolithographic models and custom-made implants, robotic surgery, tissue engineering, and facial transplantation in the field of oral and maxillofacial surgery to improve diagnostic, surgical and reconstructive methods.

Results/findings

tissue grafts and vascularised flaps are the current gold standard for the repair of defects but their limited availability, difficulty of shaping the flap to fit the defect and, most importantly donor site morbidity limit their use. robotic surgery, allows access, resection of tumours, and reconstruction with conventional free flap techniques in the oropharynx without the need for mandibulectomy. tissue engineering

avoid the need for autologous tissue transfer and can therefore be seen as more conservative methods of reconstruction. recently, facial allotransplantation has allowed whole anatomical facial units to be replaced with the possibility of sensory recovery and reanimation being completed in a single procedure.

Conclusions

Computer-aided virtual surgery, intraoperative navigation and 3-D STA models can be effectively used in oral and maxillofacial surgery for multiple indications and diverse clinical scenarios. for jaw bone regeneration using tissue engineering techniques offers exciting new prospects for the future.

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Abstract No: 0399 Rapid prototyping in oral & maxillofacial surgeries

Dr. Monika Surana, Dr. Navin Shah, Prof, HOD & PG Guide

Dept. of Oral & Maxillofacial Surgery, K. M. Shah Dental College & Hospital

Abstract

Advances have been emerging in the field of dentistry since early decades. In technological area, cadcam (computer assisted designing-computer assisted machining) which emerged in early 1980 s into dentistry for fabrication of prosthesis and crowns, many advances have occurred since then. Facilities like CAD-CAM, 3D computed tomography, rapid prototyping, stereolithography and 3D printing have become the basic aids used in various surgical procedures. Rapid prototyping (RP) is a group of techniques used to quickly fabricate a scale model of a physical part or assembly using 3D CAD data and construction of models in layer by layer manner. Mankovich et al. Initially reported the use of RP to construct models of bony structures. It is also possible to print soft tissue models and color the tumours and other structures of interest. Commonly used RP technologies for medical applications are stereo lithography and 3D printing. Traditional treatment planning for orthognathic surgery (OGS) depends on clinical examination, two-dimensional (2D) cephalometric analysis and the study of plaster dental models. Recent advances in the field of 3D imaging using cone-beam computed tomography (CBCT) have led to the development of computer-assisted OGS, in which detailed presentation of the craniofacial complex and enhanced analysis of surgical planning lead to improved predictability of surgical outcomes.

Aim

This poster is to emphasise use of this in surgical practices. Lin h.h., Ionic d., lo I. J. 3d printing in orthognathic surgery 1 –

Review. *Journal of the formosan medical association*. July 2018; 117(7): 547–558. Suomalainen a., stoor p., mesimäki k., kontio r. K. Rapid prototyping modeling in oral and maxillofacial surgery: a 2 year retrospective study. *J clin exp dent*. 2015; 7(5):e605–12.

Abstract No: 0420
Hair Transplantation: Current Concepts and Techniques

Dr. Dishant Pandit

Ahmedabad Dental College and Hospital

Abstract

Hair replacement surgery has experienced a dramatic and rapid evolution since the inception of the large punch graft nearly 50 years ago. Many techniques have been introduced and some abandoned in an attempt to achieve improved efficiency and, more importantly, better outcomes. In our quest to achieve progressively more natural results, we have moved toward smaller and smaller grafts. These grafts leave minimal scars and hence provide a better aesthetic outcome on the donor sites as well. The present poster gives a description of the commonly used hair transplantation techniques today, along with a summary of the merits and demerits of each.

Abstract No: 0424
Soft tissue changes after orthognathic surgery- cephalometric study

Dr. S.V.Haymenth

Thai Moogambigai Dental College and Hospital

Abstract

Orthognathic surgery is carried out to correct the congenital or the acquired deformities of the jaws. The capacity to alter the appearance of the facial profile increases when orthognathic surgery is performed in conjunction with orthodontics. The alterations in features of the facial soft tissues are confined to the lower third of the face when orthodontic treatment is carried out alone. However, both the middle and lower thirds of the face can be altered efficiently when orthodontic treatment is performed in conjunction with orthognathic surgery. The identification of the aesthetic factors and the prediction of the final profile of the facial soft tissues play important roles in planning the orthognathic treatment. The aim of this study is to determine the vertical and anteroposterior alterations in the soft, the dental and the skeletal tissues associated with the facial profile after orthognathic surgery.

Abstract No: 0431
Trans Oral Robotic Surgery (TORS)

Dr. Vishnu Raj R, Dr. S.C. Debnath

Regional Dental College

Abstract

Trans oral robotic surgery (TORS) is a modern surgical technique used to treat tumours of the mouth and throat via direct access through the mouth. Trans oral robotic sleep apnoea (TORSa) surgery utilizes the same approach to open the upper airway of patients with

obstructive sleep apnoea. In tors and torsa procedures, the surgeon uses a surgical robot to view and access structures in the oral cavity (mouth) and pharynx (back of the throat) without any incisions through the neck, chin or lip (these incisions are necessary in traditional, non-robotic approaches). Current tors techniques include radical tonsillectomy, resection of palate and base of skull tumours, hemi glossectomy and resection of tumours above and involving the larynx. The torsa technique is used for uvulopalatopharyngoplasty, hemi glossectomy, and other airway procedures. The tors technique was first developed in 2004–2005 by Dr. Gregory Weinstein and Bert O'Malley Jr. at the University of Pennsylvania. They proved the efficacy of the tors procedures for cancer cure, without the potentially disastrous complications of the established otolaryngologic techniques of open surgical resection and conventional endoscopic surgery. Tors afforded cancer cure with less operating time, blood loss, and complication frequency. In light of this data, the FDA approved the da Vinci system to perform tors procedures in 2009. Dr. Erica Thaler, also at the University of Pennsylvania, researched the applications of the tors approach to patients with obstructive sleep apnoea, and published her work in 2016. She found that a multilevel approach, including tongue resection and uvulopalatopharyngoplasty, increased airway space and oxygen levels in most cases. The newly minted procedure was found especially beneficial for patients without prior pharyngeal surgery.

Abstract No: 0440
Efficacy of platelet rich fibrin (PRF) Versus Zinc Oxide Eugenol in the Relief of Pain in Alveolar Osteitis – A Comparative Study

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Abstract

Background

Alveolar osteitis (dry socket) is a self-limiting condition and typically begins 1–3 days after tooth extraction. Management of alveolar osteitis consists of irrigation and insertion of intra-alveolar pastes consisting of zinc oxide eugenol. This substance is not stable, hence undergo hydrolysis to release free eugenol which is detrimental to human tissues. Platelet-rich fibrin (PRF) is a new second-generation platelet concentrate, with simplified processing, and no biochemical blood handling. PRF is a fibrin matrix in which platelet cytokines, growth factors and cells are trapped and released over a time and that can serve as a resorbable membrane. These biochemical components have well known synergistic effects on healing processes.

Objectives

To compare PRF and zinc oxide eugenol in the relief of pain in alveolar osteitis using visual analog scale (VAS) scale methods patients who received zinc oxide eugenol are named group A and those patients who received PRF are named group B. Patient's pain has been measured on 1st, 3rd, 5th and 7th days based on VAS and compared on both group of patients.

Results

Patients treated with PRF had better pain relief than those treated with zinc oxide eugenol.

Conclusion

The use of PRF has beneficial effects in pain relief in patients with alveolar osteitis.

Reference

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Abstract No: 0454**Oral cancer: novicius adscensio**

Dr. Nancy Agarwal

Manipal College of Dental Sciences, Mangalore

Abstract

Oral cancer has been a disease of elderly habituated to tobacco and alcohol. There has been a gradual change in demographics of oral malignancies, as most of its predators seem to be young teetotalers. Early diagnosis and treatment remains the key to improved patient survival. Because of the invasive nature and potential morbidity of scalpel biopsy, it is reserved for evaluating highly suspicious lesions and not for the majority of oral lesions which are clinically not suspicious. Furthermore, scalpel biopsy has significant interobserver and intraobserver variability in the histologic diagnosis of dysplasia. Advanced diagnostic tools that are practical, noninvasive and can be easily performed in an out-patient set-up will be of immense help for early detection of oral dysplasia and malignancy. Advances in molecular biology over the past decade have helped us to enrich our understanding of the complex interplay between genetic, transcriptional, and translational alterations in human cancers. Optical diagnosis techniques offer several advantages over traditional approaches, including objectivity, speed, and cost, and these label-free, noninvasive methods have the potential to change the future workflow of cancer management. The oral cavity is particularly accessible and, thus, such methods may serve as alternate/adjunct tools to traditional methods. This poster provides a summary of newer comprehensive diagnostic modalities that can be used for early detection, which is crucial for its ultimate control and prevention.

Abstract No: 0461**Cryosurgery in oral & maxillofacial surgery**

Dr. Chanchal Veer, Dr. K. C. Gupta

Mordern Dental College & Resaech Centre Indore

Abstract

Cryosurgery in oral & maxillofacial surgery “the freezing surgery” oral mucosal lesions are usually categorized into surface lesions generally involving the epithelium and superficial connective tissue of mucosa. In the treatment of oral mucosal lesions, surgical modality is considered as golden standard. There is still a need for evolution of atraumatic bloodless procedure, which could give, same or better results than surgical modality. Cryosurgery is not simply the application of freezing temperatures to tissue. The aim of cryosurgery is to kill and destroy cells. Various methods of tissue destruction have been employed in past which includes chemicals, irradiation by x-rays, and

high-frequency electric current and many others. Cryosurgery is a therapeutical method that uses freezing to obtain a tissue inflammatory and/or a destructive response. It has been successfully used for many cutaneous conditions. Its use is increasing for several conditions in the oral cavity. The oral mucosa, because of its characteristics of humidity and smoothness, is an ideal site for this technique. It shows a very good esthetic result and it may be either the first choice or an alternative option to conventional surgery. This poster emphasis on various indications, limitations and advantages of cryosurgery in the treatment of oral lesions.

Reference

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Abstract No: 0472**Recent advances of local anesthesia**

Dr. Sonu Sanyal, Dr. Sobhan Mishra Dr. S P Lenka

Institute of Dental Sciences

Abstract

Local anaesthesia is administered for pain control during dental treatments, but it may have reduced patient compliance as the procedures are done while the patient is conscious which may lead to increased dental fear. Although local anaesthesia remains the backbone of pain control in dentistry, researches are going to seek new and better means of managing the pain. Most of the researches are focused on improvement in the area of anaesthetic agents, delivery devices and technique involved. Newer technologies have been developed that can assist the dentist in providing enhanced pain relief with reduced injection pain and fewer adverse effects. Computer-controlled local anaesthetic delivery (CCLAD), tents, safety dental syringes etc. Are methods to reduce pain of the patient. The aim of this poster is to enlighten the newer devices and newer methods of rendering pain control and comparing these with the earlier used ones on the basis of research and clinical studies available.

Abstract No: 0518**Ozone olive oil in oral surgery**

Dr. Kavadi Ishwar Jasubhai, Dr. Ishwar Kavadi

Daswani Dental College and Research Centre

Abstract**Introduction**

Ozone therapy is gaining popularity as a modern non-invasive method of treatment wound healing. Ozonated olive oil is made with high quality, organic, cold pressed olive oil, ozone is put through a process of “ozone injection” which is bubbling ozone into the liquid for an extended period of time. It is a powerful oxidizing agent with a high antimicrobial power against oral pathogens, without development of

resistance has been reported not only for gaseous ozone and ozone olive oil.

Aims

Aim of the review of ozone olive oil is to quality research work and provide platform using the articles.

Materials and Methods

A total 4 number of articles are initially search for review study.

Results

Ozone is known for its power in killing bacteria, viruses and fungi. Ozone is used for medical ozone therapy. It has been used for the treatment of a number of pathological conditions with an increasing interest. Ozonated oils are used in many diseases such as joint, skin pathologies, reducing swelling and inflammation, decrease the wound healing time and help to battle harmful toxins. It was applied in the treatment of alveolitis following surgical extraction of the lower third molar; the topical application of ozone has been used in management of periodontitis. All kinds of infectious, inflammatory, traumatic, burns, wounds, soft tissue lesions respond very well to topical ozone treatment. The bio-stimulation and anti-inflammatory effects of ozone help in the management of articulation inflammatory diseases and muscular trigger points.

Result

Ozonated olive oil is effective in the healing of wounds and pressure ulcers.

Conclusion

Ozone therapy presents great advantages when used as a support for conventional treatments and is indicated for use in a wide range of dental specialties.

Abstract No: 0523

Stereolithography - A Rapid Prototyping Method

Dr. Rummaan Ahmed Sheikh, Dr Michael Pragasam

Modern Dental College & Research Centre

Abstract

In 1991 rapid prototyping method was first used for human anatomy model called stereolithography in maxillofacial surgery clinic in vienna. With the advancement of modern technology, 3d models can be built with the help of virtual prototypes. Stereolithographic models have progressively replaced traditional milled models and x-rays in the management of maxillofacial anomalies and implant rehabilitation. It helps in the fabrication of computer generated surgical templates, graphic & complex 3d implants simulation. These surgical templates seats directly on the bone and are preprogrammed with the individual depth, angulation & mesio-distal and bucco-lingual positioning of implants as planned during 3d computer simulation. Vast advantages can be mentioned like better visualization of complex anatomical structures & more precise essential information about the different applications & limitations of stereolithography for pre-operative planning, reconstructive surgeries, prosthetic constructions, implants placement and most recently bio-printing. The poster presents the usefulness and significance of stereolithography in oral & maxillofacial surgery.

Abstract No: 0526

Tissue engineering: new horizon in omfs reconstruction- reality or dream?

Dr. Mugdha Parkhi, Dr K. C. Gupta

Modern Dental College & Research Centre

Abstract

The emerging concept of artificial regeneration of tissue is likely to become clinical reality by means of harvesting stem cells followed by expansion, differentiation, seeding onto a scaffold and re-transplanting them with the help of regulatory signals from the three pillars of tissue engineering. During the last decades this new technique has gained momentum. The interest and attention that this rapidly developing area has received is based on understanding of tissue healing and integration of research and clinical practice in response to unmet clinical needs for reconstruction of dental oral and craniofacial structures. Reconstructive surgery has arrived at a standard of care that allows for repair and reconstruction of vast majority of tissues. The real challenge of tissue engineering is the reduction of surgical morbidity by the application of biological signals or bio-artificial components form stem cells that can replace the lost tissue to repair without the need of autogenous tissue transfer. Thus this poster presents the usefulness and significance of tissue engineering in reconstructive surgery in oral and maxillofacial surgery.

Keywords tissue engineering; stem cells; scaffolds; regulatory signals; maxillofacial reconstruction.

Abstract No: 0533

Role of regenerative nanotechnology in oral and maxillofacial surgery

Dr. Kommuri Baji Babu

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Abstract

Role of regenerative nanotechnology in oral and maxillofacial surgery regenerative nanotechnology is at the forefront of medical research, and translational medicine is a challenge to both scientists and clinicians. Although there has been an exponential rise in the volume of research generated about it for both medical and surgical uses. Within nanotechnology, two broad areas of research can be identified, the use of multi-functional theranostic nanoparticles for head and neck cancer, and the use of nano inspired biomaterials for improving bony regeneration specifically for oral and maxillofacial surgery. In this poster i will discuss about use of nanomaterials in regenerative maxillo facial surgery.

Abstract No: 0537

Stereolithography in Oral and Maxillofacial Surgery

Dr. Priti Pundlik Talele

Dr. D. Y. Patil Dental College and Hospital

Abstract

Charles Hull invented 3-d printing or “stereolithography” in the early 1980’s. It has since evolved and been applied in healthcare sciences since the early 2000s. The first applications were used in dental implants and custom prosthetic devices. The applications for this technological marvel have significantly grown and most recent published reviews describe the use of 3-d printing to produce bone, ears, trachea, blood vessels, tissue organs as well as novel dosage form for pharmaceuticals by personalizing drug printing fabrication at point of care while taking into account patient age, gender, race and clinic response.[1] Stereolithography (SLA) models can very effectively be used in oral and maxillofacial surgery for multiple indications and diverse clinical scenarios including, but not limited to, jaw bone regeneration using tissue engineering techniques, surgical models for mock surgeries, splints, etc. [2]. This poster aims to shed some light on the current status and future implications of the use of stereolithography in oral and maxillofacial surgery.

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Abstract No: 0541

The use of sustained released antibiotic beads in odontogenic infection

Dr. Jain Kunal Manoj

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Abstract

Introduction- odontogenic infections are the most common infections in the orofacial region which are frequently associated with existing co morbidities such as diabetes mellitus. Aggressive surgical intervention in the form of incision and drainage with removal of foci of infection such as a tooth followed by daily packing and dressing of wound is the treatment protocol. In order to improve patient compliance, sustained released antibiotic beads can be used followed by primary closure. Aim- the aim of this poster is to highlight the use of sustained release antibiotic beads in odontogenic infection in oral and maxillofacial surgery.

Materials and methods

An operated case of odontogenic space infection. Observation-sustained released antibiotic beads are local drug delivery systems which consist of calcium sulphate crystals as a scaffold for antibiotics and provide antibiotic drug delivery over a long period of time. Results-the advantages of this system are that the patient need not be on long term oral antibiotics as well as it reduces systemic toxicity of the drug. In cases of incision and drainage, primary closure can be

achieved with placement of antibiotic beads which helps the wound to heal with primary infection and also reduces daily patient visits.

Conclusion

This poster concludes the newer sustained released antibiotic beads are local drug delivery systems and their role in resolution of odontogenic infections.

Abstract No: 0561

Tissue Engineering in OMFS

Dr. Kannam.Harsha Vinay Durga Karthik

Narayana Dental College and Hospital

Abstract

Tissue engineering is a rapidly developing field in regenerative medicine. Bone grafting is one of the routinely performed procedure in omfs.current technique to augment the facial skeleton rely on either autogenous graft of bone or cartilage or alloplastic material,drawbacks of autologous tissue include limited supply, donor site morbidity, difficult to shape & resorption is unpredictable. One possible solution to provide more reconstructive structural tissue would be engineering tissue to meet requirements of the repair. Recently tissue culture techniques have been combined to polymer chemistry to provide potential source of living tissue replacement and augmentation. Here my poster depicts process to produce a bioengineered tissue and its scope in omfs.

Abstract No: 0578

Mandibular reconstruction with stromal vascular fraction - a novel approach

Dr. Nishtha Jhankar Gadkari

Dr. DY Patil Dental College and Hospital

Abstract

Tissue engineering is now contributing to new developments in several clinical fields, and mesenchymal stem cells derived from adipose tissue (HASCs) may provide a novel opportunity to replace, repair and promote the regeneration of diseased or damaged musculoskeletal tissue. Recent studies have identified an abundant source of stem cells in subcutaneous adipose tissue. Adipose stem cells (ASCs) present in adipose tissue are able to differentiate to several lineages and express multiple growth factors, which makes them suitable for clinical application. Buccal fat pad (BFP), an adipose-encapsulated mass found in the oral cavity, could represent an easy access source for dentists and oral surgeons. The stromal vascular fraction obtained from fresh bfp-derived adipose tissue and passaged ascs were analyzed to detect and quantify the percentage of ascs in this tissue. It was shown that buccal fat pad contains a population of stem cells that share a similar phenotype with adipose stem cells from abdominal subcutaneous fat tissue, and are also able to differentiate into the chondrogenic, adipogenic, and osteogenic lineage. In our institute, we used a novel approach to treat a case of mandibular unicystic ameloblastoma, using stromal vascular fraction derived and processed from buccal pad of fat. A one year follow up demonstrated active bone formation, this method proved to be a great way to generate new

bone, owing to the inherent properties of stromal vascular fraction, and it's ability to differentiate into- osteoblasts. These results define buccal pad of fat as a new and rich source of ASCS for tissue engineering purposes, with the advantage of being an accessible source for us oral and maxillofacial surgeons to obtain and process stromal vascular fraction, as an alternate method of harvesting stem cells.

Abstract No: 0615

Nanotechnology in maxillofacial surgery: the birth of a superchild!

Dr. Divya Chadda

Dr. R Ahmed Dental College and Hospital Kolkata W.B

Abstract

Introduction

Nanotechnology is defined as; research and technology development at the atomic, molecular, or macromolecular levels; in the scale of approximately 1 to 100 nm range; to provide a fundamental understanding of phenomena and materials at the nanoscale; and to create and use structures, devices, and systems, which have novel properties and functions because of their small and/or intermediate size.

Aim

This poster is aimed at giving some light on potential of nanotechnology in oral and maxillofacial surgery, implications and challenges for the future.

Discussion

Nanoparticles are extremely small, have a high surface area: volume ratio that confers mechanical, magnetic, optical, and chemical properties that are superior to those of the original materials. The use of nanoparticles for delivery can enable the drug to reach its target site more effectively enhancing the role in nanomedicine. Nanotheranostics is popularizing for diagnosis and treatment of oral cancer. In oral and maxillofacial surgical practice nanotechnology has influenced the development of tissue engineering, imaging, delivery of drugs, improved implants and the horizon is expanding.

Conclusion

Research for application of nanotechnology in various areas of oral and maxillofacial surgery continue to be evolutionary. Lack of proper clinical trials has restricted its commercial use as of now, but as new evidences of its pathbreaking capabilities are gradually coming to the surface, it will not be a distant future when one day, we will be able to see its application right next to us.

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Abstract No: 0624

Stromal vascular fraction: a new concept for maxillofacial surgeons

Dr. Nilesh Prakash Khandelwal

Dr. D.Y.Patil Dental College and Hospital

Abstract

Regeneration of tissue from stem cells is been studied for the past many decades. Maxillofacial surgeon's deal with a variety of oral pathologies which might require resection or curettage of cystic cavities. What should be done after this kind of surgical procedure? How should the tissue be the soft or hard tissue be regenerated? The answer to this may be the buccal pad of fat which is a rich source of adipose-derived stem cells and have the potential to differentiate into osteocytes, chondrocytes, fibroblasts etc. when provided a proper growth medium along with growth factors which might be obtained from platelet rich plasma which is an autologous substrate of patients own blood obtained after centrifugation. Adipose/fat tissue provides an abundant source of stromal vascular fraction (SVF) cells for immediate administration and can also give rise to a substantial number of cultured, multipotent adipose-derived stromal cells (ADSCS). In cases of maxillofacial surgeries, the buccal pad of fat tissue can be accessed very easily had has been used for covering of various small defects. So, to regenerate the tissue this concept of svf has been introduced and may aid for tissue regeneration in the field of regenerative medicine.

Abstract No: 0669

Radiographic evaluation of regenerated bone in decompressed lesion using ImageJ software

Dr. Shakshi Ganeriwal, Dr. Vineeth Kumar Dr. Kavitha Prasad Dr. R. M Lalitha

Faculty of Dental Sciences, M S Ramaiah University of Applied Sciences

Abstract

Background

Odontogenic tumors (OTS) are lesions derived from epithelial, ectomesenchymal or both the elements that have been part of the tooth-forming apparatus. Even though jaw-cysts are usually painless they tend to increase in size by resorbing the neighbouring bone. Decompression is a procedure in which an opening is created to reduce pressure within the cystic cavity and induce bone formation. Being a conservative treatment, it generates fewer or no post operative complications and produces less morbidity for the patients. Imagej software (java image processing program) is a ready-made tool box for analyzing image and shape parameters of odontogenic cysts and tumors.

Aim

Radiographic evaluation of regenerated bone in decompressed large cystic defects by means of imagej software - a prospective observational study.

Materials and methods

Patients who reported to the department of oral and maxillofacial surgery with large cyst or cyst like lesions of the jaw which was histologically proven, during the period of 2014–2016 who were treated with decompression method, were included in this study. Decompression under local anesthesia was done for all the patients

and the surgical stent/obturator was given within a week as a protocol. Patients were recalled and follow up radiographs were taken at every 3 months regular intervals to assess the bone formation using imagejsoftware.

Results/findings

Patients were followed up for a period of 12 months and was assessed for incremental bone regeneration using imagej software. The result will be presented in the poster.

Abstract No: 0681

A review on 3 dimensional printing in maxillofacial surgery

Dr. Saurabh S Pillai

AB Shetty Memorial Institute of Dental Sciences

Abstract

3D printing is a recent advancement in the field of science and technology. Although familiar, it is nascent in the medical field and applications are limited. The rapid growth of the industry along with the cheaper availability of 3d printers is a feature that should be considered. The innovative and gradually expanding technology is currently used in dentistry to fabricate patient specific implants, pre surgical anatomic models, mandibular reconstruction plates, and surgical guides. High precision, decreased surgical time are a few of the benefits of this technology. This poster aims to elicit the different applications of 3d printing and its feasibility in oral and maxillofacial surgery.

Abstract No: 0684

A review on virtual surgical planning in maxillofacial surgery

Dr. Mihir Joshi

AB Shetty Memorial Institute of Dental Science

Abstract

The complex 3-dimensional anatomy of maxillofacial skeleton creates a formidable challenge for surgical procedure. The main aim of our research is to implement entirely computer based maxillofacial surgery planning. Advances in computer aided design and computer aided manufacturing technology have created increasing applications for virtual surgical planning which provides surgeons with clear 3d visualization of patient's anatomy to develop a surgical plan prior to entering the operating room, fabrication of cutting guides, stereolithographic models and fabrication of custom implants. In this review, we will describe current and evolving uses of virtual surgical planning in maxillofacial surgery.

Abstract No: 0689

Use of regenerative nanotechnology in oral and maxillofacial surgery - present and future

Dr. Pooja Ravi Kapse

Institute of Dental Studies and Technologies

Abstract

Introduction

Regenerative nanotechnology is in the forefront for the medical and surgical research. There is exponential rise in the volume of research generated in this field due to evident outcomes holding the core principles of regeneration and its benefits in future.

Objective

To enhance the maxillofacial surgical practice with the use of nanotechnology that has influenced the development of tissue engineering, imaging, delivery of drugs, and has improved implants.

Method

There are three types of nanomaterials- 1. Fullerenes are carbon allotropes that can adopt different shapes. When anantithrombogenic surface is added, carbon nanotubes can be used as vascular micro-catheters, stents, and implants 2. Nanoparticles e.g. Quantum dots acts as drug carriers or labels for tracking cells, 3. Nano composites that are multiphase solid materials, includes polyhedral oligomeric silsesquioxane (POSS) increasing the tissue ability for growth in tissue engineering. Nanoscaffolds for tissue engineering- poly (l-lactic acid) (PLLA) approved by fda is used for reconstructive surgery for bone. Nanoaha is used to make better implants as it more closely simulates the nanostructure of natural bones, giving the prospect of better osteointegration, more natural mechanical properties, less immune reaction, and greater control of cellular responses. Sentinel lymph node biopsy- qd can be used in deep tissue imaging, making localization accurate and sensitive, and subsequent excision of foci of cancer is possible. Nanotechnology in drug delivery- nanotheranostics for head and neck cancer can be used as delivery vehicles to transport drugs and even genes to cells. Implantable material- surface features are introduced to nanocomposite implant materials that alter the immune response to the material or bacterial ability to colonise it.

Conclusion

Regenerative nanotechnological uses in oral and maxillofacial surgery have recent exciting breakthroughs and so possess better future perspective as we delve in nanoworld.

Abstract No: 0693

Tissue engineering and its future in oral and maxillofacial surgery

Dr. Saiswarup Badrinath

AB Shetty Memorial Institute of Dental Sciences

Abstract

Tissue engineering is a combination of biochemical and biomaterial engineering that involves transplantation of cells to create bio-artificial tissues and organs. It is a rapidly advancing discipline which

promises hope for the oral and maxillofacial surgery where the reconstruction of maxillofacial defects in hard and soft tissues is a challenge. Though autologous grafts and vascularised free flaps are current gold standards, they present complications at both donor and reconstructed sites. Tissue engineering has the potential to revolutionize the practice in oral and maxillofacial surgery with its tissue-matched, prefabricated, prevascularised bony or soft tissue composite grafts. This poster aims to review this rapidly advancing technology and its current and possible future applications within the speciality and discuss the existing hurdles yet to be overcome. Tissue engineering is a combination of biochemical and biomaterial engineering that involves transplantation of cells to create bio-artificial tissues and organs. It is a rapidly advancing discipline which promises hope for the oral and maxillofacial surgery where the reconstruction of maxillofacial defects in hard and soft tissues is a challenge. Though autologous grafts and vascularised free flaps are current gold standards, they present complications at both donor and reconstructed sites. Tissue engineering has the potential to revolutionize the practice in oral and maxillofacial surgery with its tissue-matched, prefabricated, prevascularised bony or soft tissue composite grafts. This poster aims to review this rapidly advancing technology and its current and possible future applications within the speciality and discuss the existing hurdles yet to be overcome.

Abstract No: 0698
Dental Pulp Stem Cells: A Trivialised Player?

Dr. Ratima Chopra

Dr. D Y Patil Dental College & Hospital, Pune

Abstract

Stem cells are clonogenic, self-renewing, progenitor cells that can generate one or more specialised cell types. One of the sources of the stem cells is the dental pulp tissue. Dental pulp stem cells (DPSCs) and stem cells from human exfoliated deciduous teeth (SHEDs) originate from the neural crest cells which explains their multi-potency and pluripotency. DPSCs because of their neural crest inheritance result in adipogenic, osteogenic & chondrogenic differentiation. They have shown high plasticity, can be cryopreserved for longer durations (thus, ideal candidates for cell banking), show good interactions with scaffolds and growth factors. Their collection causes least morbidity to the anatomical site. In oral & maxillofacial surgery, the future directions in stem cell therapy can lead us to establishing regeneration of large cranio-facial defects caused due to cyst enucleation, tumour resections & trauma tooth regeneration, engineered bone grafts, tissue-engineered joints (TMJ), cartilage regeneration, condyle shaped scaffolds, regenerative endodontics and regenerative periodontics! In medicine, DPSCs can be used in degenerative diseases like Alzheimer's disease, bone related diseases and spinal cord defects, myocardial infarction. Stem cells are the trivialised players of the game of regenerative medicine but they will eventually prove their true potential! "be like the stem cells, differentiate yourself from others".

Abstract No: 0730
Cephalometric norms for Kerala population using burstone analysis

Dr. Josepaul C I, Dr. Varghese Mani MDS, Dr. Sankar Vinod MDS

MAR Baselios Dental College

Abstract

The aim of the study was to define the normal dentofacial patterns of adult population belonging to Kerala and the objective was to establish the skeletal norms of the Kerala population using burstone analysis and to identify the variation in the craniofacial pattern of Kerala population and to evaluate the skeletal variation between males and females of Kerala. The sample comprised of 100 participants and 50 males and 50 females between the age group of 18 to 30 years. The mean value of the age 23.69 ± 2.87 years. Lateral cephalograms of all the 100 participants were recorded and were traced and analysed and interpreted using the landmarks and values given by burstone's analysis (cogs).

References

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Abstract No: 0773
Cross sectional study on microbial contamination of mdv after opening

Dr. M. Kalyani

Vishnu Dental College, Bhimavaram

Abstract "A cross sectional study on microbial contamination of multiple anaesthetic dose vials after opening in a dental teaching hospital"

Need

To evaluate factors that may play a role in the contamination of multidose vials.

Aims and objectives

Investigate the prevalence and pattern of microbial contamination of multiple dose vials in the dental teaching setup evaluate the effect of rate of withdrawals on the potential contamination of multidose medication vials.

Results

A total of 60 mdvs were collected from nursing station & samples were subjected to culture under strict aseptic conditions. None of them were marked with any patient's name, which indicated that they were not used for single patient. Gram-positive bacteria were more significantly involved than gram-negative ones.

Conclusion

Our data demonstrated that repeated use of vials especially if basic sterility measures are disobeyed can cause microbial contamination of administered products to the patients. If multi-dose vials must be used, aseptic technique must be strictly adhered to avoid contamination.

References

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2. Bacterial contamination of multiple-dose vials: a prevalence study 2004 by the association for professionals in infection control and epidemiology, inc.

Abstract No: 0806**EGFR Inhibitors in Squamous Cell Carcinoma**

Dr. Irene Suzette Philip, Dr. Abhijit Datta

Divyjayothi College of Dental Sciences and Research, Gaziabad, Uttar Pradesh

Abstract

More than 90% of tumours in head and neck are squamous carcinomas. Squamous cell carcinoma of head and neck is a prevalent disease both in united states and worldwide with an overall poor prognosis, in part due to limited activity of existing therapy. Primary therapy is largely dictated by the anatomical origin of the cancer and whether distant disease is present. Many patients with localized disease are treated with chemoradiotherapy, either in the definitive or adjuvant setting, and those with metastatic disease are treated with palliative chemotherapy. The chemotherapy used in squamous cell carcinoma of head and neck can be toxic, whether given with radiation or alone. Most patients present with locally or regionally advanced disease, are offered curative therapy in form of external beam radiotherapy with a concurrent radiosensitizing systemic agent, most commonly platinum-based or targeting an epidermal growth factor receptor (egfr). The development of novel epidermal growth factor receptor monoclonal antibodies with improved efficacy and less toxicity, could result in a positive impact on overall tolerability of therapy and potentially survival. Epidermal growth factor receptor inhibitor can be used as part of concurrent or postoperative regimen in context of definitive treatment for patients with squamous cell carcinoma of head and neck, as well as in patients with the recurrent or distantly metastatic disease.

Abstract No: 0828**Tissue engineering as a minimally invasive method**

Dr. Waseem Mohammed Alam, Dr. Sobhan Mishra Dr. S.P. Lenka

Institute of Dental Sciences

Abstract

As the field of tissue engineering enters a phase of clinical translation, there is a need to consider the surgical principles for transplantation of engineered biologic organs and tissues, which have traditionally been

constructed with harvested cells seed on scaffolds and cultured in laboratory bioreactors. The methods of minimally invasive surgery should be an important component of clinical translation of tissue engineering techniques, which have been verified in vitro. In situ tissue engineering can be used to harness the body's ability to regenerate through the process of cell homing, an innate selfhealing mechanism to recruit stem cells to injured or diseased tissues. By employing the body as a bioreactor, this technique of tissue engineering can be considered a minimally invasive method.

Abstract No: 0857**Error analysis: how precise and accurate is 3 dimensional printing?**

Dr. Chithaluru Aruna Jyothi, Dr.Chitra Chakravarthy,Dr.Ravi Patil, Dr.Shivraj Wagdargi

Navodaya Dental College

Abstract**Background**

Additive manufacturing is being used extensively now to print medical models. These models are being used now not only for the purpose of preoperative planning and mock surgery but also for fabrication of surgical guides, pre bending of reconstruction plates and also condylar repositioning appliances. Dimensional accuracy and reproducibility is of prime importance as the mock surgery performed on the models needs to be transferred exactly to the surgical site.

Aims and Objectives

This study has been done to evaluate the accuracy of 3D printed models by comparing them with linear measurements placed on the dry mandible, CT scan images and the medical 3D printed model.

Materials and methods

On 5 dry mandibles, linear (vertical and horizontal) indentations were made at known measurements. These mandibles were then subjected to ct scans of high resolution. The same indentations were visible on the scanned image as well. Dicom images were extracted from the scan and 3D CAD models were generated from the scanned mandibles using mimics software. Measurements were made with electronic vernier caliper on the dry mandible and on the 3D printed model. Measurements were also made on the ct scan data. All the 3 measurements were compared and statistically analyzed.

Results

Dimensional accuracy using fdm printers for medical models like the mandible was found to be almost close to the original dry mandible measurements.

Conclusion

3D printing produces near-anatomical 3D models. The high 3D accuracy holds a promise in the clinical scenario for preoperative planning, mock surgery, dental implant surgery, mandibular reconstruction, mid face construction and other maxillofacial applications.

Abstract No: 0913**Salivary gland endoscopy & minimal invasive surgery***Dr. Satchidananda Meher, Dr Sobhan Mishra Dr Sthita Prajna Lenka**Institute of Dental Sciences***Abstract**

Currently surgical approaches partially overlap & in some cases endoscopically assisted surgery is applied. minimal invasive approach or less aggressive surgery for traditional parotidectomy suggest selective deep lobe parotidectomy instead of total excision of the gland in benign cases only involve deep lobe. It describes several modern technique to choose from the direct sialoendoscopic removal of stone via salivary ducts, the endoscopy assisted intraoral surgery, the extracorporeal shock wave lithotripsy (ESWL), a combination of ESWL with sialoendoscopic approach in order to remove stone fragments, ductal stretching and extra capsular dissection of benign tumor of parotid.

References

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Abstract No: 0914**Accessing the Inaccessible***Dr. Rishabh Harish Jain, Dr. B.M.Rudagi**ACPM Dental College & Hospital, Dhule***Abstract**

Endoscopy is a minimally invasive procedure which allows the physician to observe and manipulate the target organ through a keyhole or reach inaccessible targets. Endoscopy could be an important tool for any investigations or preoperative assessment. It results in a less invasive procedure through a keyhole approach and faster recovery for patients. However, it is a blind procedure that carries the risk of false passage formation. Recent literature suggests the use of nasal endoscopic - assisted probing to minimize mucosal trauma, decreases the chance of creating a false passage and provides the optimum management option of different congenital variants. General advantages include less pain, no or smaller skin excision, lower risk of infection, shorter hospital stay and tissue recovery, generally a better quality of life. Disadvantages could be a steep learning curve, cost, periodic machine update, and technology dependency. The push for greater diagnostic yield has driven advances in optical physics and bio-engineering which are revolutionizing diagnostic and therapeutic endoscopy.

Abstract No: 0916**Application of botulinum toxin (type a) in the treatment of gummy smile: a prospective clinical study***Dr. Payal Padmakar Mate**School of Dental Sciences, Krishna Institute of Medical Sciences, Karad, 415110***Abstract**

Abbreviations:- botulinum toxin type a: btx-a compound muscle action potential: c-map

Introduction

Gummy smile is a condition where there is excessive exposure of the maxillary gingiva during smile. People with gummy smile are usually self-conscious about it and few are even psychologically affected by its unaesthetic appearance. Btx-a is a neurotoxin, which when used in controlled dosage, has many beneficial effects. It is a stable, sterile, vacuum-dried powder that is diluted with saline solution. It prevents the conduction of acetylcholine at the neuromuscular junction resulting in relaxation of elevator muscle of upper lip which causes the lip to lengthen, thus camouflaging the gummy smile. The effect of btx-a is reversible and the normal nerve impulse activity and associated muscle contractions resume after 3 to 12 months.

Aims and Objectives

This study was conducted to assess the effect of btx-a in the reduction of excessive gingival display during smiling materials and methods: ten patients with gummy smile were included in the study. Btx-a was injected in all subjects in the overlapping points of levator labii superior alaeque nasi, levator labii superiors and zygomaticus minor. Digital camera was used for taking close up peri-oral photographs pre and post-operatively. C-map is a procedure of measuring muscle action potential. C-map (levator labii superior alaeque nasi, levator labii superiors and zygomaticus minor) of all the 10 patients were recorded pre and post-operatively. The patients were followed up at 2 weeks, 1 month and 3 months.

Results

All the data was recorded and subjected to statistical analysis. The final result is awaited and will be available shortly and shall be discussed during presentation.

Abstract No: 0917**Transoral Laser Microsurgery***Dr. Koduru Nikhila**Kamineni Institute of Dental Sciences***Abstract**

Abstract topic: transoral laser microsurgery (TLM)

Background

In the recent times, lasers microsurgery surgery has been used in multiple oral surgical procedures for the treatment of head and neck tumors and non-malignant diseases. The intention behind the study is to evaluate outcomes of a minimally invasive approach, using transoral laser microsurgery (tLM) as the standard treatment for oropharyngeal malignancies.

Aim

Present the working principle of the procedure and current clinical applications of laser microsurgery in the head and neck region and highlights the benefits and the limitations of current laser microsurgical systems.

Objectives

It is a novel and minimally invasive approach to neoplasms that has significant advantages over classic open surgery. It provided excellent visualisation and instrument access that allowed successful surgical resections from human patients in the upper aero digestive tract.

Methods

The references of relevant articles were used to identify experimental or observational studies of outcomes for upper aero digestive tract treated by TLM.

Results

Considerable numbers of articles were identified relating outcomes in upper aero digestive tract cancers treated with tlm.

Conclusion

Trans-oral laser microsurgery as a primary treatment for oropharyngeal malignancy confers excellent speech, survival and swallowing proficiency.

References

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Abstract No: 0920

The application of pre-operative three-dimensional models in the management of maxillofacial pathology – is it really useful? - an institutional study

Dr. Arunkumar Shadamarshan R

Armed Forces Medical College

Abstract

Maxillofacial bony pathological lesions require a wide range of surgical procedures for their successful management. These range from just an observation and follow up to complete resection and reconstruction with composite microvascular flaps with an objective to restore the facial form and function and aesthetics with minimal morbidity to the patient. Many technological advancements have enabled the maxillofacial surgeon to provide reliable and predictable outcomes. One such advancement that has been used in the field of oral and maxillofacial surgery is 3-D models using a no. Of techniques. This single operator single institution study has been carried out over a period of 02 years. The inclusion criteria included established cases of mandibular pathology that were taken up for resection with continuity defects and fixation of reconstruction plates. The study samples were divided into two groups; group I constituted those managed with 3-D models and group II constituted those cases managed without 3-D models. Comparison over several parameters including surgical time, complications, accuracy of fixation, occlusion, range of mandibular movements, patient understanding of the procedure, patient compliance and overall treatment cost. Statistical analysis of the results revealed a superior and a promising role of 3-D

models in these surgical procedures with superior performance on all these parameters when compared to control group managed by conventional means. This poster is a representation of the study carried out in this institution. Future applications of this system have also been included in the poster. This poster has been made to emphasise the fact that 3-d models can be of reliable use in the restriction of the operative time, reduction of complications especially during the use of reconstruction plates for fixation. Modified and mirror image overlapped 3-d models can be of immense use in such situations.

Abstract No: 0921

Tissue Engineering in Oral and Maxillofacial Surgery

Dr. Syed Mehmood Hussaini

Kamineni Institute of Dental Sciences

Abstract

Tissue regeneration in oral and maxillofacial surgery changes call for innovation and innovation leads to progress. Tissue engineering offers an innovative and exhilarating alternative for maxillofacial reconstruction. The term tissue engineering was initially defined by the attendees of first national science foundation in 1988. The artificial generation of tissues, organ or even more complex living organisms was matter of myth. During the last decade this vision become feasible and has been recently introduced in clinical medicine. In oral & maxillofacial surgery it offers an exciting alternative to existing treatment regimens for reconstruction or replacement of the oral and craniofacial complex, which include the teeth, periodontium, bone, soft tissues, salivary glands and TMJ as well as blood vessels, muscles, tendons & nerves. In this poster presents the various aspects of tissue engineering used in oral and maxillofacial surgery.

Abstract No: 0922

The Role of Gamma Radiosurgery in Trigeminal Neuralgia

Dr. Smriti Kumari

ITS Dental College, Hospital and Research Centre

Abstract

Trigeminal neuralgia (TN) is a debilitating pain condition characterized by agonizing, paroxysmal, and lancinating pain in (v1). First-line treatment includes anticonvulsant and antidepressant, but this often fails to provide pain relief and is associated with various side effects, leading patients to seek other treatments options. Second-line treatment modalities include surgical procedures such as microvascular decompression, and ablative procedures such as percutaneous balloon microcompression, radiofrequency rhizotomy, glycerol rhizolysis, and gamma knife radiosurgery (GKRS).

Aim and objective

To check the feasibility of multiple repeat gamma knife radio surgeries for trigeminal neuralgia. Effective short-term outcomes have been well documented for trigeminal neuralgia (TN) patients treated with gamma knife radiosurgery (GKRS) have reported success rates of 70–90% with median follow-up intervals of 19–75 months.

Discussion

Optimal treatment of tn remains challenging, as each clinical situation can vary significantly. Medications in the form of anticonvulsants,

such as gabapentin and carbamazepine, as well as antidepressants, are the predominant method for treating tn-related facial pain. However, there is a fraction of patients who experience only limited relief from pharmacotherapy or are unable to endure the side effects of the prescribed drugs and, thus, seek other treatment alternatives.

Conclusion

GKRS is a safe, effective, and minimally invasive treatment modality for patients with medically intractable tn or those who are ineligible or refuse open surgery.

Reference

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Abstract No: 0930 Techniques in Facial Nerve Reconstruction

Dr. Anish Nelson

A.J Institute of Dental Sciences

Abstract

Facial nerve reconstruction is mainly done in cases of facial palsy, trauma, tumours, choleostoma of middle ear and less commonly schwannomas of facial or vestibular nerve. Pre operatively patients are subjected to emg and mri evaluation to assess the severity of dyskinesia and synkinesia treatment is of three different methods 1) early extra temporal facial nerve reconstruction. A) direct facial–facial nerve suture – indicated within 24 h b) facial nerve interpositional graft c) hypoglossal facial jump nerve anastomosis d) upper lid loading e) sling plasty f) dynamic muscle transfer 2) early reconstruction if extra temporal reconstruction not possible a) hypoglossal facial jump anastomosis plus upper lid weight b) cross face nerve suture c) temporalis/digastric muscle transfer d) sling plasty 3) late reconstruction after 12–18 months. A) in case of musculature existing 1) hypoglossal facial jump anastomosis plus upper lid weight 2) modification of cross face facial nerve suture namely the newly introduced babby sitter technique using masseteric branch of trigeminal nerve b) in case of only nerve supply existing 1) microvascular muscle transfer 2) temporalis muscle transfer c) muscle and nerve supply not existing 1) sling plasty evaluation of the surgical results were assessed based on sydney system.

Abstract No: 0935 Gene Therapy in OMFS

Dr. Supraja Bondalapati

Vishnu Dental College

Abstract

Gene therapy is one of the most attractive fields in medicine. It is a form of molecular medicine based on the insertion of a functional gene into cells to correct a cellular dysfunction or to provide a new

cellular function. The concept of gene delivery to tissues for clinical applications has been discussed around half a century, but scientist's ability to manipulate genetic material via recombinant dna technology made this purpose to reality. Initially, gene therapy was conceived as a way to treat life-threatening disorders (inborn errors, cancers) refractory to conventional treatment, to date gene therapy is considered for many non-life-threatening conditions including those adversely influence on a patient's quality of life. Among the non-life-threatening conditions craniofacial defects are of challenging problems for maxillofacial surgeons over the years. With the aim of regenerating tissues, gene therapy is a breaking new technology by acting as a delivery system for therapeutic genes in the craniofacial region rather than treating genetic disorders. Through this poster presentation, various applications of gene therapy in oral and maxillofacial surgery will be emphasised.

Abstract No: 0947 Robotics in Oral and Maxillofacial Surgery

Dr. Ron Dutta, Dr. Senthil Kumar.K Dr. Vandana Shenoy.K Dr. C.S.C. Satish Kumar

Thai Moogambigai Dental College and Hospital

Abstract

Surgical manipulation in the head and neck region requires adequate knowledge, skill and dexterity. The constant endeavour of surgeons was to develop a minimally invasive surgery (MIS) that can be well tolerated, provides rapid recovery with lower pain, better cosmetic results as well as minimal use of drugs. Robotic assisted precision surgeries offer this type of mis in several surgical specialties. The application of robotic technology to head and neck procedures potentially offers patients alternatives to conventional open surgical procedures with decreased morbidity. Additionally, transoral robotic surgery (TORS) may extend minimally invasive head and neck surgery beyond transoral laser microsurgery with the ability to work around corners while avoiding certain line-of-site limitations. The term "TORS" describes the application of robotic devices to a variety of procedures that already are clinically accepted. This poster describes the technical aspects of tors and to assess the value of this new technology by highlighting different relevant parameters.

Abstract No: 0950 The surgical art of facial makeover using 3d printing technique

Dr. Nitish Chandra Gupta, Dr. Chitra Chakravarthy

Navodaya Dental College

Abstract

Rapid advancements in robotics and computer aided surgeries has revolutionized the field of medicine and surgery. Maxillofacial surgery has benefited from these technological advances in the management of complex soft tissue and bony pathologies. Rapid prototyping bio models are playing a very significant role not only for patient education, diagnosis of defects but also in surgical planning.

We present a case of facial deformity in the form of maxillary excess and retrognathia corrected using orthognathic surgery supported by the use of surgical guides fabricated using additive manufacturing.

Aim

The purpose of this study was to highlight the use of virtual surgical planning, fabrication of surgical guides using 3 D printing technology and their advantage in creating a symmetrical osteotomy in orthognathic surgery patients

Materials and methods

Virtual surgical planning was performed using high resolution ct scan of the patient. Surgical templates for anterior maxillary osteotomy and genioplasty were designed virtually and 3D printed. Mock surgery was performed on the 3D printed jaws of the patient using the surgical guides and plates were pre-adapted on the repositioned jaws. These surgical guides were used to transfer the same osteotomy cuts to the surgical site and osteotomy was performed.

Results

We successfully performed the osteotomy, as planned, using the 3D printed surgical guide. This technique is highly accurate and reduces the surgical time taken under general anaesthesia. Clinically patient's facial aesthetics was significantly improved with good symmetry and straight profile, and a desirable occlusion was achieved.

Conclusion

Use of additive manufacturing in surgical planning reduces anaesthesia time, reduces operating time and provides better esthetic and functional.

Conclusion

The integration of 3 D imaging and computerized surgery continues to bring about newer and better changes in the conventional surgeries making the outcome much more beneficial to the patient.

Abstract No: 0956

Computer-aided design/computer-aided manufacturing in maxillofacial surgery

Dr. Qaiser Nazir

Dayananda Sagar College of Dental Sciences, Bangalore

Abstract

Computer-aided design (CAD) is the process of creating, modifying, analysing or optimizing a design using computer system. Computer-aided manufacturing (CAM) is the process of planning, managing or controlling manufacturing using computer system. With the development of CAD/CAM technology, there have been increasing cases of restructuring maxillofacial defects to improve appearance and function with more accurate surgery and shorter operation times. With CAD/CAM software, accurate pre-operative planning can be established, and surgeons can perform virtual ablation and reconstruction procedures accordingly. CAD/CAM is an umbrella term used to describe all forms of surgical planning or execution that incorporate various forms of advanced imaging, software, analysis and planning and, in some cases, rapid prototyping (RP) technology, robotics and image-guidance systems. The virtual surgery and computer-aided design and manufacturing can be used by the maxillofacial surgeon to create tremendously accurate postoperative result. It is an advanced method in approaching some of the problems and illustrate the application of these techniques in mandibular reconstruction, orthognathic surgery, maxillofacial trauma and temporomandibular joint reconstruction. Thus, complex craniofacial defects are corrected without significant complications and with excellent aesthetic results. This poster showcases the effective use of CAD/CAM technology for superior results in pre and post-operative maxillofacial surgery.

Abstract No: 0958

Rapid prototyping and stereolithography

Dr. Surabhi Singhai, Dr. Pramod Krishna B. Dr. Rajdeep Singh Dr. Prashant Tamgade

Chhattisgarh Dental College and Research Institute

Abstract

Medical imaging has been used to provide information for diagnostic and therapeutic purposes. The goal of rapid prototyping is to quickly fabricate complex shaped 3dimensional (3D) parts directly from computer-aided design models in physical prototype. Scanned data from ct/cbct is converted into virtual 3D models. A commercially available stereolithography technique was applied to fabricate scaffolds using poly(ethylene oxide) & poly(ethylene glycol) dimethacrylate photopolymerizable hydrogels. Mechanical characterization shows the construct to be comparable with soft tissue in terms of elasticity. Stereolithographic models can be used for diagnosis, surgical planning, teaching, custom-made implants and prosthetic device. Its application for osteotomy guide, distractor placement guide, occlusal wafer guide for orthognathic surgery are increasing. These prototypes can be manufactured within a day and are made strong enough to be machined. This poster elucidates in knowing various applications of rapid prototyping and stereolithography in the field of oral and maxillofacial surgery.

Abstract No: 0963

Simvastatin - a surefire for osteogenesis in postextraction sockets?

Dr. Abhilash Ajay Mahtole

Navodaya Dental College & Hospital

Abstract

Background

New bone formation involves production of new bone matrix by osteoblasts and its subsequent mineralization. In the process of bone formation, growth factors like bone morphogenetic proteins (BMPS) play a critical role in proliferation and differentiation of osteoblasts. bmp-2 causes differentiation of multipotent stem cell line into osteoblast-like cells. The role of simvastatin in lowering serum cholesterol level is well described. Recent findings suggest they have role in bone formation as well.

Aim and objectives

This prospective study is conducted to evaluate the efficacy of simvastatin on bone formation in extraction sockets.

Materials and methods

10 patients undergoing normal extraction of any teeth will be selected. Extraction sockets of left side(upper/lower) will be considered as cases and right side(upper/lower) as controls. overall 10 extraction sites will be assigned to each group. Atraumatic extraction will be done in all cases following which simvastatin mixed with gelatin sponge will be placed in extraction socket of left arch while only gelatin sponge will be placed in the right arch. a tooth selected as case in one quadrant shall have the same tooth as control in adjacent quadrant. all sockets will be then closed with 3–0 vicryl. The patients would be followed-up and complications such as dry socket, pain, swelling will be recorded. radiovisiography will be taken immediately

after extraction, at 1.5 months and 3 months to record changes in the density of alveolar bone. the radiographic measurements will be compared and the differences will be statistically analyzed.

References

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Abstract No: 0973

Robotic surgery: see more... reach more...treat more!!

Dr. Janhavi Modi

YMT Dental College, Khargar

Abstract

Head and neck region is complex with many vital vessels and muscles crisis crossing each other. Surgical manipulation in this area requires adequate knowledge, skill and dexterity.transoral resection of pharyngeal tumors can be challenging due to their location in a narrow anatomic space. Transoral robotic surgery is an emerging technique that provides several benefits over existing treatment regimens and over open surgery for head and neck cancer. Trans oral robotic surgery (TORS) techniques allow wide-view, for visualization of the mucosal surfaces of the head and neck through an endoscope, while avoiding the extensive external cervical incisions often required for open surgeries. Along with this enhanced access have come innovative procedures and uses of this technology for multiple facets of head and neck diseases. The Da Vinci robotic technology is the most advanced platform for minimally invasive surgery available today. The Da Vinci robotic technology enables surgeons to perform delicate and complex surgeries through a few tiny incisions, instead of giving the patient a big cut. The hand movements of the surgeon are converted into corresponding micro-movements of instruments inside the patient's body. Another surgical robot has also recently entered the market to compete with the da vinci robot. The flex robotic system from medrobotics is unique as it is a flexible snake like device that can be steered to the operative site rather than having rigid arms like the da vinci robot. This system enables surgeons, full hd visualization, to guide the device through the twists and turns of the body's pathways.

Result

Minimally invasive surgery can be performed on sites that were difficult or even impossible to reach before. Thus, as technology continues to improve and innovation in surgical robotics is expected to continue as more companies attempt to capture this market.

Abstract No: 0983

Nanotechnology in Oral and Maxillofacial Surgery

Dr. Akshat Lahoti

Maharanaprataap College of Dentistry and Research Center Gwalior

Abstract

Nanotechnology in oral and maxillofacial surgery surgeons are constantly looking for minimally invasive ways to treat their patient as recovery is faster when infection rates with in the hospital and saves time of surgeons.so to do this,many tools have been introduced now a days to make post operative recovery period predictable and uneventful.lessor trauma is inflicted upon a patient.oral and maxillofacial surgery which is considered as bridge between medicine and dentistry requires such kind of technique for faster recovery of their patient. The nanotechnology in oral and maxiilofacial surgery helps in shortening patients recovery period and reducing nanoneedles,nano surgical blades,nano robots,nanocoated implants,nano wound dressing matarials,drug delivery in oral cavity to make better diagnostic imaging. So,due to the invention of nanotechnology we can easily make our field easier and simple so that a proper diagnosis can be made and proper treatment can be done. It is beneficial for both surgeons and patients.

Abstract No: 0987

PRP and it's bioactivity in maxillofacial surgery

Dr. Vishakha Agarwal

Dayananda Sagar College of Dental Sciences

Abstract

Platelet rich plasma (PRP) is used in various procedures in oral and maxillofacial surgery because of its osteoinductive properties that stimulates the healing process. It has high concentration of platelets that releases bioactive proteins and growth factors like platelet derived growth factors (PDGF), vascular endothelial growth factors (VEGF), and transforming growth factors which are necessary to initiate and accelerate tissue repair and regeneration. They target-specific polypeptides that play an important role in cell proliferation and differentiation and encourage wound repair. It is used extensively in alveolar bone repair following extraction of impacted third molar, alveolar bone grafting in patients with cleft alveolus palate and in combination with autogenous cancellous bone, for osseointegration in implants, in mandibular odontogenic cyst after enucleation combined with bone grafts, bone regeneration in maxillary sinus procedure, in construction of continuity defects of mandible. It has also shown an important role in hair regrowth. PRP reduces postoperative bone resorption and shows increased density of bone and good vascular supply. Its derived from patients own blood therefore no immune reactions. PRP gels is one of the most promising method for treatment of bone, cartilage and soft tissue defects. This poster encompasses the

use of PRP in various omf surgical procedure owing to it's superior benefits in the postoperative healing of the wounds.

Reference

1. Marukawa E, Oshina H, Iino G, Morita K, Omura K. Reduction of bone resorption by the application of prp in bone grafting of the alveolar cleft. *J. Craniomaxillofac Surg.* 2011;39: 278–283.

Abstract No: 1011

PRF as media for bone healing in minor surgical defects

Dr. Shaik Rabbani

CKS Theja College of Dental Sciences and Research

Abstract

Platelet rich fibrin is a new approach to tissue generation and is becoming a valuable adjunct to prompt healing in many procedures in dental and oral surgery, especially in aging patients due to their potential ability to increase regeneration of soft and hard tissues. The effect of platelet derived products is considered to be result of high number of platelets which contain a wide range of growth factors. they are not just growth factors but autologous blood concentrates containing active molecules, which eliminates concern about immunogenic reaction and disease transmission. PRF is an autologous source of platelet derived growth factors that is obtained by sequestering and concentrating platelets by centrifugation. The use of PRF in surgical practice could have beneficial outcomes that are reducing bleeding, enhancing soft tissue healing and bone regeneration. Studies conducted on humans have yielded promising.

Results regarding the application of PRF to many dental and oral surgical procedures (i.e. tooth extractions, periodontal surgery, implant surgery) the use of PRF has also been proposed in the management of bisphosphonate related osteonecrosis of jaw (brnj) with the aim of enhancing wound healing and bone maturation. Since PRF is free of potential risks for patients, not difficult to obtain and use, it can be employed as a valid adjunct in many procedures in oral and dental surgery.

Abstract No: 1012

Use of 3-D stereolithography in oral & maxillofacial surgery

Dr. Nakul Chaudhary

ITS Dental College

Abstract

3-D stereolithography in oral & maxillofacial surgery in the upcoming new technologies 3-D stereolithography (sla) is one of the greatest achievements of science & allows 3-D computed tomography to generate solid plastic replicas of anatomic structures.

Objectives

3-D sla has a great role to play in the reconstruction of the facial skeleton, particularly in trauma surgeries, where it helps in restoring the pre morbid anatomy of the face. It also helps in predicting the outcome of orthognathic surgeries.

Discussion

These bio-models are fabricated through a process called powder depositional modeling by spectrum z 510 3d color printer. After the fabrication of models, the geometric data is used to drive the sla process, and the def/ppf prototype part is successfully manufactured. These scaffolds have application in the tissue engineering of the bony substrates. The use of these models significantly improved predictability of clinical outcomes when compared to similar treatments without its use. Total operating time is reduced resulting in decreasing the duration of general anesthesia and reduced wound exposure time. This helps in assessment of extensive traumatic and pathological defects in a 3-dimensional study, prior to surgical reconstruction and fabrication of custom prosthesis, sizing of bone grafts and manufacturing of scaffolds for bone regeneration.

Conclusion

3-d sla is an effective technique and helpful in oral & maxillofacial surgeries in various clinical and traumatic surgeries. Incorporating this technology for jaw bone reconstruction and craniofacial deformities using tissue engineering techniques will give a broader knowledgeable approach in the field of surgery.

Reference

1. Mehra P., Miner J., Innocenzo R., Nadershah N. Use of 3-d stereolithographic models in oral and maxillofacial surgery. *J. Maxillofac. Oral surg.* 2011;10(1):6–13.

Abstract No: 1019

5-Fluorouracil - End of KCOT Re-occurrence?

Dr. Shreedhar Shukla

AMC Dental College & Hospital

Abstract

Keratocystic odontogenic tumors (KOTS) are benign lesions occurring in the maxilla and/or mandible with potential for significant morbidity and reoccurrence. Historically, treatment of the kot involved simple enucleation; however, this was suboptimal due to a high recurrence rate. Other treatment options include marsupialization, curettage, peripheral ostectomy, and adjunctive solution application for chemical cauterization, removal of overlying mucosa, or resection, either alone or in combination. A targeted approach to kot treatment has been proposed based on current understanding of the molecular genetics of kots. It is known that kots develop via ptch gene mutations, similar to basal cell carcinomas (BCCS). Mutations in ptch1 causes smoothened (SMO) activation and sonic hedgehog (SHH) signaling resulting in neoplastic growth. The antimetabolite drug, 5-fluorouracil (5-FU) was shown to induce apoptosis by inhibiting shh. The use of 5 - fluorouracil have shown to reduce the rate of reoccurrence of kot's, with additional benefits like ease of application and no nerve tissue damage, and reduction in tumor markers for kcot.

References

1. Ren C, Amm H, Devilliers P, et al.: targeting the sonic hedgehog pathway in keratocystic odontogenic tumor. *J Biol Chem* 287: 27117, 2012
2. Ledderhof NJ, Caminiti MF, Bradley G, Lam DK, Topical 5-fluorouracil is a novel targeted therapy for the keratocystic odontogenic tumor, *Journal of oral and maxillofacial surgery* (2016).

Abstract No: 1041
Concentrated growth factors in third molar surgery

Dr. R.Chinnaiah, Dr.D.Durairaj MDS

Adhiparasakthi Dental College and Hospital, Melmaruvathur

Abstract

Surgical extraction of impacted mandibular third molar is one of the most common minor surgical procedure performed by the oral and maxillofacial surgeons.as with any surgical removal of impacted lower third molar is always associated with postoperative complications such as pain, swelling and trismus. Many clinicians have therefore stressed the need for better pain, swelling and trismus control in patients who undergo third molar surgery. Concentrated growth factors (CGF) has been suggested to enhance the healing of bone grafts and enhance the integration of bone in the extraction socket. Concentrated growth factor was first developed by sacco in 2006. It can be used as a barrier membrane to accelerate soft tissue healing. Concentrated growth factor does not require any chemical or anticoagulants so it is free from viral transmission diseases. Concentrated growth factor is 100% autologous. Surgeons use concentrated growth factors as a barrier membrane to accelerate the soft tissue healing or can be mixed with bone graft to accelerate new bone formation. This poster presentation aims to to evaluate and compare utility and efficacy of concentrated growth factor on soft tissue healing and bone healing following surgical removal of a mandibular impacted 3rd molar with the control group.

Reference

1. Tejesh Yelamali, Saikrishn D (2015) Role of platelet rich fibrin and platelet rich plasma in wound healing of extracted third molar sockets: a comparative study. *J Maxillofac Oral Surg* 14(2):410–416.

Abstract No: 1059
Advanced techniques in exodontia

Dr. Ahammed Haris H

PMS College Dental Science and Research

Abstract

Dental extraction, once considered as a punishment has now become one of the finest works in dental surgery. Over the last two decades, research to find newer, safer and quicker methods has revolutionized dentistry. Atraumatic extraction technique (aet) which intend the removal of tooth or root, while reducing the trauma on gingiva, bone, other surrounding hard and soft tissue structures has been an objective in oral surgery. Instruments such as bennex-vertical extractor, powered periostome, peizosurgery, sonosurgery, physics forceps, ogram system are examples in that direction of atraumatic extraction. The main benefits of these techniques are immediate implant placement,faster healing, reduced need of bone grafting and soft tissue

augmentation leading to faster prosthetic rehabilitation in a limited time span. Reduced bleeding and inflammation are other important benefits we acquire by using such newer techniques.

Abstract No: 1090
3D Printing in oral and maxillofacial surgery

Dr. Shreya Shukla

Rungta College of Dental Sceinces and Research, BHILAI, C.G

Abstract

3D printing is a technology,which converts a 3d image of CAD/CAM into a 3D model. In recent years it has emerged to be a boon in maxillofacial surgery. 3D printing are widely used in dental implant surgery,mandibular reconstruction,orthognathic surgery and mid-face reconstruction.use of 3d printing as well as treatment procedure. This poster will briefly describe the use of 3d printers in oral and maxillofacial surgery.

Abstract No: 1094
Manuka honey as a therapeutic approach after 3rd molar surgery

Dr. Vivek Shah, Dr. Amanat Kaur Dhaliwal

ITS CDSR Muradnagar

Abstract

Introduction

Prevalence of impacted third molar worldwide is 24–40%. The most common complication arising after third molar surgery are pain, swelling, unhealed socket, dry socket etc. To reduce the postoperative complications honey has been used in sockets, as honey has antimicrobial properties. Manuka honey is derived or extracted from manuka tree (*leptospermum scoparium*) found in new zealand. The presence of methylglyoxal in manuka honey is the reason for its antibacterial property.

Aim

To assess the efficacy of manuka honey on healing after mandibular third molar surgery.

Materials and methods

20 patients with bilateral impacted mandibular third molar (mesioangular). Two group. Group a control and group b study. Group a, after third molar surgery closure was done and normal medicines (amoxicillin 500 mg and nsaid diclofenac sodium) was given. Group b after third molar surgery manuka honey was placed, sutured and medicines was prescribed. Parameters facial swelling, pain (using vas scale) mouth opening and presence or absence of dry socket on third and seventh day of surgery for both the group.

Abstract No: 1106**Modified lip switch vestibuloplasty for atrophic mandibular ridge (tngdch approach)**

*Dr. Senthil Kumar.M, PROF.Dr.Prasad.C PROF.Dr.Balaji.
J Associate Prof.Dr.Arun Kumar Assistant Prof. Dr.Senthilkumar. A*

Government Dental College Chennai

Abstract

Background- vestibuloplasty is the surgical procedure to deepen the vestibule by altering the soft tissue attachments in regards of increasing residual alveolar ridge height. Three types based on techniques have been reported in the literature are: submucosal vestibuloplasty, soft tissue graft vestibuloplasty and lip switch vestibuloplasty.

Aim and objective

To increase the height of residual alveolar ridge and size of denture bearing area using tngdch approach with acrylic stent followed by circum mandibular wiring.

Materials and methods

A patient referred from the dept. Of prosthodontics to increase the height of residual alveolar ridge to facilitate adequate denture bearing area. Examination revealed completely edentulous mandibular ridge in anterior segment. Treatment plan was opted modified lip switch vestibuloplasty by tngdch approach.

Results

Using tngdch approach for modified lip switch vestibuloplasty results were satisfactory. Increased vestibular depth and noticeable height of alveolar ridge in anterior segment of mandible.

Conclusion

The desired results were obtained as predicted. This newer approach for modified lip switch vestibuloplasty is effective

Reference

Trans positioned flap vestibuloplasty combined with implant surgery in the severely resorbed atrophic edentulous ridge (journal of oral implantology volume lxxviii/no.4/2002).

Abstract No: 1133**Triple drug therapy for treatment of osteoradionecrosis**

Dr. Bhavesh Shashikumar Dhoke, Dr.B.M.Rudagi

A.C.P.M Dental College and Hospital, Dhule

Abstract

Osteoradionecrosis of the jaws is a complication of radiation treatment for cancer of head and neck. Recent guidelines from the national institute for health and care excellence(nice) have suggested that the medical management of osteoradionecrosis(orn) of jaws should be used in clinical trial only,and some drug and therapeutics committee have withdrawn funds for such prescription with increased scrutiny on the use of these agent,the aim of this study was to ascertain current trend in the presentation and management of orn with particular focus on which agent are being used. New theories on it's pathophysiology have allowed the development of potential treatment modalities,including the use of pentoxifylline and tocopherol.in this study we examined the outcome of patient with orn prescribed pentoxifylline and tocopherol,clodronate.

Abstract No: 1137**Tissue bio-fabrication in cranio-maxillo-facial surgery: a systematic review**

Dr. Janice John

Govt Dental College, Nagpur

Abstract**Background**

Maxillo-facial defects may occur due to accidents, congenital anomalies, pathological or surgical causes. Autologous bone graft is considered to be the "gold standard". The complex anatomy of the facial bones and soft tissue along with the lack of suitable donor tissue in all patients often hinders successful repair. Tissue engineering, which aims to create tissue-matched, pre-fabricated, pre-vascularised bony or soft tissue composite grafts, or both, therefore has the potential to revolutionise maxillo-facial surgery.

Aims and Objectives

This study aims to review the latest technology in tissue engineering,the existing research,the appropriate biomaterials and its current and future applications in cranio-facial surgery and the contemporary challenges.

Materials and methods

A complete review of literature based on pubmed,cochrane database,specialty journals like JOMS, BJOMS AND IJOMS from inception till date was done using the keywords: bone,soft tissue, regeneration,tissue engineering,bio-fabrication,cranio-maxillo-facial surgery.

Results

The search yielded 900 articles of which 365 relevant articles were thoroughly evaluated.

Conclusion

Tissue engineers need improved bio-mimetic scaffolds, the ability to pre-vascularise three-dimensional tissue constructs, and to engineer the complex interface of the different facial tissues to closely resemble tissues physiologically. The role of the maxillo-facial surgeon is to drive forward research to provide a firm evidence base for its future use.

Reference

1. Kawecki F, Clafshenkel WP, Fortin M, Auger FA, Fradette J. Biomimetic tissue-engineered bone substitutes for maxillofacial and craniofacial repair: the potential of cell sheet technologies. *Advanced healthcare materials*. 2018 mar;7(6):1700919.

Abstract No: 1147**Intubation techniques: maxillofacial surgeries**

Dr. Shalini Tripathi

Babu Banarashi Das College of Dental Sciences

Abstract

Maxillofacial surgeries under general anaesthesia require intubation by means of several techniques based on the surgical requirements. Many intubation techniques are available such as nasotracheal, oro-tracheal,or submental,retromolar/retrotuberosity, or emergency

intubation through tracheostomy. This presentation highlights the intubation, advantages and limitations of various intubation techniques.

Abstract No: 1156

Robotic surgical system in maxillofacial surgery: Skill meets technology

Dr. Nishant Kumar

ITS Dental College

Abstract

Objective-to weigh the advantages of the emerging robotic assisted surgery over standard open surgery in the field of maxillofacial region. Robot-assisted surgery has been increasingly applied in the head and neck region and has ushered in a new era of minimally invasive surgery, breaking the limit of human hands. The robotic surgical system is a novel, minimally invasive procedure with promising impact and is in an early stage of development. The primary outcomes of robotic surgery in the head and neck region demonstrate good disease control, quick postoperative functional recovery and low surgical morbidity. Maxillofacial surgeries have conventionally been performed with large incisions because of the complicated anatomy and limited surgical space. These procedures typically result in significant surgical morbidity and speech dysfunction. However, with the evolution of minimally invasive surgeries the surgeons can access tissue through a few small incisions and with the assistance of robotic surgical systems, maxillofacial surgery is performed with less blood loss, fewer complications, shorter hospitalization and better cosmetic results than standard open surgery in cases of craniofacial conditions like head and neck neoplasms, cleft lip and palate, obstructive sleep apnea syndrome. This poster aims to weigh the advantages of the new emerging robotics assisted surgery with the standard open surgery in the field of maxillofacial region.

Reference

1. Liu HH, Li LJ, Shi B, Xu CW, Luo E (2017) Robotic surgical systems in maxillofacial surgery: a review. *Int J Oral Sci* 9(2):63.

Abstract No: 1158

Prophylactic removal of third molar

Dr. Ujjwal Kumar

A J Institute of Dental Sciences

Abstract

Background: mandibular and maxillary third molars are mostly consigned to 'waste bins' in dental practices because they are terminal in developmental timing and positioning in the dental arches, and regarded as functionally non-essential. Thus, many dental practitioners do not attach significance to the presence of third molars when making therapeutic recommendations to patients about preservation of the dentition. The prophylactic extraction of asymptomatic impacted wisdom teeth is defined as the (surgical) removal of wisdom teeth in the absence of local disease. But there is no clearly defined

criteria in this context. The aim of this presentation is to review and to discuss consensual aspects and controversies related to third molar extraction, and to answer the following question: is there evidence to justify the prophylactic extraction of third molars? To conclude: systematic reviews report that there is no evidence to support or refute prophylactic removal of asymptomatic impacted third molars, even in adults. Whenever indicating extraction of third molars, dentists should have a justifiable reason, taking into account future treatment planning and a cost/benefit analysis to justify the prophylactic removal of third molars.

Abstract No: 1160

Bells palsy medical and new surgical treatment modalities

Dr. Shriram Dadahari Gite, Dr.B. M. Rudagi

A.C.P.M Dental College and Hospital, Dhule

Abstract

Bells palsy describe by scottish surgeon Sir Charles Bells in 1821, it affect 11–40/100000 of population per annum. It is caused by oedema of facial nerve induced by herpes virus, other causes include ischemia, autoimmune inflammatory disorder and hereditary, it is characterised by sudden onset, unilateral lower motor neuron weakness of facial nerve, other feature include retroauricular pain, impaired tolerance of noise and ipsilateral disturbances of taste, hyperacusis, alter taste sensation, impaired lacrimation, feeling of fullness of ear and otalgia. Clinical sign are unilateral weakness of muscle of facial expression of entire face and platysma in ipsilateral neck, combination of both medical and new surgical technique available to treat long term sequelae of bells palsy.

Abstract No: 1183

Negative Pressure Wound Therapy in Oral and Maxillofacial Surgery

Dr. Aishwarya Jayachandra

A J Institute of Dental Sciences

Abstract

Background

Negative pressure wound therapy (NPWT) is the application of a continuous or intermittent subatmospheric pressure to a localized wound environment using a topical negative pressure dressing (TNPD) connected to a vacuum pump. It has been in use since 1990's in the treatment of acute and chronic wounds on the torso and limbs, and has been used to treat diabetic foot ulcers. In the field of oral and maxillofacial surgery, however, npwt is still at its budding stages. Given the complexity of wounds, usage of negative pressure wound therapy can be a useful adjunct to dressings in the head and neck regions. Aim: this poster aims to elucidate the inception, the development, the mechanism, and the vast scope of negative pressure wound therapy in oral and maxillofacial surgery.

Methods

A literature search was done using pubmed, research gate, and google scholar. Keywords: wound healing, negative pressure dressing,

vacuum assisted dressing.

Conclusion

Negative pressure wound therapy (NPWT) is an excellent modality for treating complex head and neck wounds with minimum or nil complications. However, at the moment there is a low level of evidence to justify the use of negative pressure wound therapy (npwt) in the treatment of chronic head and neck wounds; therefore, further clinical trials should be conducted to better understand the utility of this system for head and neck surgery.

References

1. Asher SA, White HN, Golden JB, Magnuson JS, Carroll WR, Rosenthal el. Negative pressure wound therapy in head and neck surgery. *Jama facial plast surg.* 2014;16(2):120–126. <https://doi.org/10.1001/jamafacial.2013.2163>
2. Application of vacuum sealing drainage in oral and maxillofacial surgery. Yi Lin1, Huiming Wang1, Xian Zhang. *Biomedical research* 2018; 29 (3): 628–632.

Abstract No: 1187

Role of 3D Printing in Oral and Maxillofacial Surgery

Dr. B.Murali Krishna

MNR Dental College and Hospital

Abstract

In recent times with technology 3D printing has become great interest in surgery now a days. Use of 3D printing gaining its importance in guiding for dental implants and study/physical models for prosthodontics, orthodontics and surgery the manufacture of dental, craniofacial and orthopedic implants. Role of 3D printing in accuracy in patient specific pre-bent reconstruction plate in mandibular region. More accurate results can be obtained by prebent reconstruction plate in mandible than in intraoperatively bent plates. The aim of the study is about the important role of 3D printing in mandibular accuracy reconstruction through prebent plates than intraoperative bent plates.

Abstract No: 1191

3D Printing - reinventing conventional treatment modalities

Dr. Daraqshan

Navodaya Dental College

Abstract

Background

A 40 year old female patient reported to our department with inability to open her mouth since childhood. patient had a restricted diet, strained breathing and aesthetic concerns due to the same reason. After careful examination and investigations, the patient was diagnosed with bilateral Temporomandibular joint (TMJ) ankylosis and severe bird face deformity.

Aims and objectives

The aim of the surgery was to use newer diagnostic, treatment planning and treatment tools for carrying out conventional procedures in order to improve the ease and efficacy of treatment.

Methods

Phase 1: considering the age and primary concern of the patient the release of the bony ankylosis was done first, virtual surgery was used for better assessment and surgical planning along with 3D printed surgical guides/stents as a guide for the TMJ release. Phase 2: to correct the bird face deformity, bilateral distraction osteogenesis was performed with pre planning using 3D printed jaws of the patient.

Results

Based on this case, we noticed that the use of 3D printing technology as a diagnostic and treatment tool helped in gauging the depth of ankylosed bone which lead to decreased operative time. the guide helped in a more accurate osteotomy, reducing the possibility of human error. Virtual planning, mock surgery and use of surgical stents gave a better surgical outcome.

Conclusion

It was observed that the use of the 3D printed models and surgical guides helped the operators to strategically plan and carry out the surgery. It gave the operators a new perspective to a conventional method of treatment which resulted not only in a functionally stable mandible but also an aesthetically pleasing one.

Abstract No: TR 2308

3D CBCT imaging: “small cone but a big scoop” for oral surgeons

Dr. Nikhat Akbar Dalvi

M.A.Rangoonwala College of Dental Sciences and Research Centre

Abstract

Accurate diagnostic imaging is a key factor for diagnosis and treatment planning. Since the inception of ct in the 1970 s, it has become one of the commonly used imaging methods. Three dimensional (3D) imaging provided by CT technology gives the opportunity to the clinician to examine the oral and maxillofacial (OMF) region without superimposition and distortion of the image. Compared to conventional 2d imaging procedures, CT involves higher radiation doses. Recently, cone-beam computed tomography (CBCT) specifically designed for maxillofacial imaging was introduced to offset some of the limitations of conventional ct scan method. the main clinical applications of cbct dealt for use in oral and maxillofacial surgery are as follows: dental implantology, impacted and supernumerary tooth, omf pathology, maxillofacial trauma, temporomandibular joint (TMJ) disorders, dentofacial discrepancies, and cleft palate. Temporomandibular disorders associated with degenerative pathologies or abnormalities in the bony structures of condyle, glenoid fossa, and articular eminence such as cortical erosion, articular surface flattening, osteophytes, condylar hyper-, hypo-, or aplasia, ankylosis, and coronoid process hyperplasia can be visualized. All kinds of pathologic lesions which affect bone tissue in the omf region including infection, cysts, tumors, and osteonecrosis can be monitored. It is also possible to compare the bone density values of the cleft and non-cleft sites to evaluate the success of alveolar cleft repair.

References

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2. Benlidayi Me, Tatli U, et al. Comparison of bovine-derived hydroxyapatite and autogenous bone for secondary alveolar bone grafting in patients with alveolar clefts. *Journal of Oral and Maxillofacial Surgery.* 2012;70:e95–e102.

Abstract No: TR 3803
Piezosurgery - a new technique

Dr. Athiramol C K

A.J. Institute of Dental Sciences

Abstract

Piezo bone surgery also known as piezosurgery is a new technique for osteotomy and osteoplasty utilizing an innovative ultrasonic surgical apparatus, which spares soft tissue for bone cutting by its ultrasonic microvibrations. Main advantages of piezosurgery being used in maxillofacial and craniofacial surgeries are because of its characteristic features such as: it allows very precise cutting, avoids bone cutting using an osteotome, it spares soft tissue such as brain, dura-mater, palatal mucosa and inferior alveolar nerve. Although it increases bone cutting time but not the overall operative time because of the absence of soft tissue cutting only disadvantage faced is the device lacks the power.

Abstract No: TR 7348
Dental pulp stem cells-A ray of hope

Dr. Monica Gajul

Dr. D Y Patil Dental College and Hospital PIMPRI

Abstract

Background

The science of tissue engineering of regenerative medicine has seen enormous development particularly in stem cell research. Stem cells are undifferentiated cells capable of differentiating into multiple functional cell types. Irrespective of their source, they have three general properties i.e. unspecified and undifferentiated, can give rise to specialised cell types, are capable of dividing and renewing themselves. There are two basic types of stem cells—the embryonic and the adult stem cells. Dental pulp stem cells(dpscs) belong to adult type of stem cells. Their potential is yet to be fully explored and understood. Here is an attempt to understand the role of stem cells in various oral and maxillofacial lesions. Aim: to evaluate the use of dental pulp stem cells in dentistry.

Materials and Methods

Search engines pubmed, google search and institutional library were used.

Results

Dental pulp tissue engineering is a promising field that can potentially have a major impact on the oral health. Depending on specific signals from their environment, dpscs can either regenerate new stem cells or undergo a differentiation process. They can differentiate to odontoblasts, osteoblasts, endotheliocytes, smooth muscle cells, adipocytes, chondrocytes and neurons.

Conclusion

Stem cell therapy is emerging as a revolutionary treatment modality to treat diseases and injury, with wide ranging medical benefits. There are several potential aspects of using stem cells in reparative and reconstruction of tissues. The stem cells of dental origin appear to have the ability to develop into more types of body tissue than other

type of stem cells. Hence, further in vitro and in vivo research about the activity of stem cells in dentistry should be conducted.

Reference

1. Har A, Park JC (2015) Dental stem cells and their applications. *Chin J Dent Res* 18(4):207–12.

Abstract No: 0892
Transoral Robotic Surgery

Dr. Rajkumar Keerthana

Kamineni Institute of Dental Sciences

Abstract

Minimally invasive surgery when compared to traditional surgery has gained popularity in medical and surgical field. Recent developments of minimally invasive surgery includes robot assisted surgery. With the assistance of robotic surgical system,maxillofacial surgery is performed with less blood loss,fewer complications,shorter hospitalization and better cosmetic results than standard open surgery.throughout the twenty-first century, robotic surgery has been used in multiple oral surgical procedures for the treatment of head and neck tumors and non malignant diseases. This poster reviews the clinical application of robotic surgery in head and neck region and highlights the benefits and limitations of robotic surgical systems.

Key references robotic surgery,da vinci robot,

Category: TMJ Disorders and Surgery

Abstract No: 0177
Temporomandibular joint replacement for TMJ ankylosis – A case report

Dr. Daisy.L, Dr. Anuradha V

M.R.Ambedkar Dental College, Bangalore - 5

Abstract

Temporomandibular joint (TMJ) ankylosis is a pathologic condition where the mandible is fused to the fossa by bony or fibrotic tissues. This interferes with mastication, speech, oral hygiene, and normal life activities and can be potentially life threatening when struggling to acquire an airway in an emergency.

Materials & Methods

Considering the increasing interest in TMJ prosthetic replacement, it appears that both surgical and post-surgical phases of treatment need to be standardized.

The condylar (or mandibular) implant, made of metal cobalt-chromium-molybdenum (co-cr-mo) alloy or titanium alloy. In both cases the implants have a roughened titanium porous coating on the implant surface that contacts bone. Co-cr-mo alloy contains nickel.

The fossa of the implant is made of high density polyethylene that has shown excellent wear resistance during mechanical testing. The screws, made of titanium alloy, are used to attach both the condylar and the fossa implants to bone.

Discussion

Studies on total alloplastic TMJ replacement outcomes showed acceptable improvements in terms of both pain levels and jaw function, thus making these interventions worthy of further evaluation.

Case report

Following the protocols, presenting a case report of a 26 year old female who had ankylosis of TMJ since 1 year of age who had undergone replacement of TMJ using zimmer biomet prosthesis, who was followed up for a year.

Abstract No: 0179

Autologous blood injection for chronic recurrent temporomandibular joint dislocation

Dr. Beena Sivakumar, Dr. Darpan Bhargava, Dr. Shaji Thomas

Peoples College of Dental Sciences and Research Center

Abstract

Introduction

Hypermobility of the temporomandibular joint (TMJ) is a condition where there is an excessive range of motion which is not associated with a pathology. It can occur unilaterally or bilaterally during routine activities like speaking, yawning, laughing. If the dislocation occurs several times then it is termed as chronic dislocation.

Objectives

The objective of this study was to use autologous blood injection (abi) in patients with chronic recurrent TMJ dislocation. Methods: a randomized clinical trial was conducted among 5 patients with complaint of recurrent dislocation of the TMJ reporting to the outpatient department. Under aseptic precautions, using tragus and lateral canthus of the eye as anatomic landmark arthrocentesis was done in the superior joint space followed by injection of 2 ml of autologous blood drawn from the anti-cubital fossa intra-operatively. Immobilization was done using barton bandage along with anti-biotic cover.

Result

Patients were followed up for a period of 6 months. Episodes of dislocation was absent in all the patients with adequate mouth opening. No patients showed signs of any post-operative complications.

Conclusion

Abi into the TMJ is a safe modality for non-surgical management of chronic recurrent joint dislocation which is successful and cost-effective.

References

- Varedi P, Bohluli B. (2015) autologous blood injection for treatment of chronic recurrent TMJ dislocation: is it successful? Is it safe enough? A systematic review. Oral maxillofac surg. <https://doi.org/10.1007/s10006-015-0500-y>.
- Coser R et al. (2015) Autologous blood injection for the treatment of recurrent mandibular dislocation, Int J Oral Maxillofac Surg. <https://doi.org/10.1016/j.ijom.2015.05.004>.

Abstract No: 0202

Condylar Hyperplasia

Dr. M Karthik Vishwas

Vydehi Institute of Dental Sciences and Research Centre

Abstract

Introduction

Condylar hyperplasia (ch) is a disease of temporomandibular joint causing a unilateral, progressive, non-neoplastic growth including both the shape and size of the neck and condyle of mandible. The ch is a self-limiting disease, however, it is characterized by progressive and independent growth that results in the bone volume of one condyle being greater than that of the other.

Materials & Methods

Surgical treatment, namely high condylectomy, which is performed in conjunction with orthognathic surgery to correct facial deformity, is performed when there is clear scintigraphic evidence of hyperactivity in the articular region.

Discussion

Ch is divided into an active phase and stationary phase depending on the growth status. The activity level of the condyle is greatly correlated with mandibular asymmetry. Clinically this condition is readily discernible by the asymmetric rotated appearance of the mandible and a tilted mandibular occlusal plane, often with a unilateral open bite.

Conclusion

Clinical presentation can be further categorized as hemi mandibular hyperplasia (h.h.), resulting in a caudal displacement of the affected side from enlargement of the ascending ramus; and hemi mandibular elongation (h.e.), resulting in horizontal displacement from elongation of the horizontal ramus.

Both anomalies can occur at the age of 5 to 8 years and are usually detectable during puberty. Some believe that these conditions can be distinguished based on histopathologic findings, and furthermore, the location of pathological hyperactive growth may vary.

Abstract No: 0333

TMJ reconstruction in growing child: a review of literature

Dr. Himani Joshi

SCB Dental College & Hospital

Abstract

Introduction

Pediatric facial fractures represent a small proportion of all maxillofacial injuries. This is largely in part due to key anatomic factors that protect pediatric craniofacial skeleton from facial fractures, such as smaller size, malleability of facial bones, less pneumatized paranasal sinuses, larger fat pads, and unerupted buttressing teeth.

These notable differences in the anatomy and the developmental patterns make management of pediatric maxillofacial trauma uniquely challenging compared with that of the adult population.

Materials & methodology

the primary goals of treatment include restoration of pretraumatic occlusion, facial projection, facial symmetry, mandibular range of motion, and masticatory function.

Postoperative rehabilitation with home physiotherapy is an essential component of treatment.

Results

Complications of pediatric condylar fractures include temporomandibular joint pain, noises, limited mandibular opening, masticatory dysfunction, facial asymmetry, malocclusion, and ankylosis. Therefore, reconstruction of this joint, particularly in growing patients, requires careful consideration and meticulous technique.

Conclusion

Distraction osteogenesis is a useful tool for mandibular reconstruction, particularly for congenital deformities or ankylosis, though long-term stability varies by indication. Costochondral grafts and free fibula flaps are the most versatile autogenous reconstructive options. The use of alloplastic total joint replacement has burgeoned in recent years and may have a role in pediatric reconstruction, particularly for progressive resorptive diseases.

Abstract No: 0361

Management of TMJ ankylosis by interpositional gap arthroplasty using temporalis myofascial flap: a case report

Dr. Ashwin Hiremath, Dr. Neelkant Warad

Al-Ameen Dental College and Hospital

Abstract

Introduction

Temporomandibular joint ankylosis is characterized by the formation of a bony or fibrous mass that replaces the normal articulation. An ankylotic block causes a decrease in mandibular mobility. Particularly hindering mouth opening, as well as anterior and lateral movement.

Temporo mandibular joint (TMJ) ankylosis associated with difficulties in speech, mastication, swallowing, yawning, poor oral hygiene, and interferes with nutrition and dental treatment there are also restricted airway problems and impeded eruption of mandibular molars. In growing patients, deformities of the mandible and maxilla with malocclusion.

Materials and Methods

this case sought to determine the efficacy of interpositional arthroplasty with temporalis muscle and fascia flap in the treatment of unilateral temporomandibular joint (TMJ) ankylosis.

Discussion

This case report evaluated the postoperative results of interpositional arthroplasty on temporalis muscle and fascia flap.

The operative protocol for unilateral TMJ ankylosis entailed, (1) resection of ankylotic mass, (2) ipsilateral coronoidectomy, (3) interpositional tissue transfer to the TMJ with temporalis muscle and fascia flap, and (4) early mobilization and aggressive physiotherapy. Result the results of this protocol were encouraging, while the functional results of interpositional arthroplasty on temporalis muscle and fascia flap were satisfactory.

Review articles

Use of temporalis fascia flap in the treatment of temporomandibular joint ankylosis: a clinical audit of 5 years (Suday Rajurkar et al. Contemporary Clinical Dentistry | volume 8 | issue 3 | July - September 2017.

Interpositional gap arthroplasty by versatile pedicled temporalis myofascial flap in the management of temporomandibular joint ankylosis - a case series study. Aneja V, Raval R, Bansal A, Kumawat V, Kaur J, Shaikh AA J Clin Diagn Res.2016;10:zr01-zr04.

Abstract No: 0428

Alloplastic Temporomandibular Joint Replacement

Dr. Mohammed Arshad Pathan

Darshan Dental College and Hospital

Abstract

Introduction

Temporomandibular disorders encompass a set of clinical conditions that affect the temporomandibular joint, the masticatory muscles and the associated tissues. Many therapeutic alternatives can be considered, being divided into non-invasive, minimally invasive and invasive interventions.

Patients with severe pain and discomfort in Temporo mandibular joint (TMJ) disorders like degenerative joint disorders/osteoarthritis, inflammatory joint disease, ankylosis, post traumatic condylar loss/damage, post surgical condylar loss, major congenital deformity and tuberculosis of condyle etc.

Materials & Method

Total TMJ replacement has been an option since the nineteenth century, but the recent prosthesis choice arose following the development of christensen prosthesis in 1963.

it has cobalt chromium alloy fossa with ramus component with an acrylic condylar cap which was modified in 1997 with all cobalt chromium components. During 1970, kent prosthesis (VKI) came and went out of vogue due to protoplast reaction.

An adjusted VKI prosthesis although successful was withdrawn due to litigation associated with its predecessor. TMJ concepts, first choice, it uses CAD CAM.

Discussion

Technologies.biomet (lorenz) makes a stock and custom made prosthesis with similar component to concepts system.

Results in a recent series of 84 patients reviewed for 3–5 years after replacement, there were significant improvements in pain and dietary function (by 90%) and mouth opening improved by 42–69% (49)1.

Conclusion

this poster aims to show the outcome of the TMJ replacement surgery with prosthesis maintaining good quality of life, painless joint with all functional jaw movements.

Reference

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Abstract No: 0452

Distraction osteogenesis in the treatment of tmj ankylosis with mandibular micrognathia

Dr. Shibasis Biswas

Institute of Dental Sciences

Abstract

Temporomandibular (TMJ) ankylosis is the fusion of the condyle to glenoid fossa which results in restricted movement of the condyle.

When occurring at younger age it affects the growth of the mandible which results into micrognathia, retruded chin, reduced airway space and compromised function and aesthetic. Since the revision of kabans protocol with addition of distraction osteogenesis (DO).

It has become the most preferred option for the correction of mandibular deformity in patients with TMJ ankylosis.

Aims and Objectives

To evaluate the sequential management of TMJ ankylotic patients having secondary deformity undergoing do followed with ankylotic release.

Methods

4 patients were included in the study having TMJ ankylosis with micrognathia and facial asymmetry. All patients underwent DO

First followed by ankylotic release after 5–6 months.

Post-operative radiographs were taken during the activation period and at the end of consolidation period.

Results

Sufficient mouth opening was achieved for all patients. Appearance was improved remarkably. Continuous follow-up of the patients were done. There was no incidence of relapse or reankylosis noted in any of the patients.

Conclusion

DO has proved to be a novel method for treatment of TMJ ankylosis with facial deformity and reduced airway space. In patients having a compromised airway space it is ideal to undergo DO first. Undergoing mandibular DO first also gives predictable osseous distraction and excellent vector control. This also has an advantage of better patient compliance.

References

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2. Zhang et al. the sequential treatment of temporomandibular jointankylosis with secondary deformities by distraction osteogenesis. J Sleep Med Disord 3(7):1071(2017).

Abstract No: 0471

Arthrocentesis of the Temporomandibular Joint

Dr. Abhishek Kumar, Dr. Mandeep Singh

Buddha Institute of Dental Science and Hospital

Abstract

Internal derangement of the Temporo mandibular joint (TMJ) is characterized by displacement of the intra-articular disc, resulting in clicking popping sounds.

Arthrocentesis is a method of flushing out the TMJ by placing needles into the upper joint compartment using local anesthesia or sedation.

Ringer's lactate or saline is injected into the joint by the use of needle.

It has two techniques two needle arthrocentesis and single needle technique.

Abstract No: 0527

Prevention of temporomandibular joint (TMJ) re-ankylosis - A challenge

Dr. Srivatson V, Prof.Dr.A.Thangavelu., MDS, DNB, FIBOMS., Head of the Department

Department of Oral and Maxillofacial Surgery Rajah Muthiah Dental College & Hospital

Abstract

One of the main challenges to maxillofacial surgery in surgical management of Temporo mandibular joint (TMJ) ankylosis is to prevent and do the necessary to reduce the chances of re ankylosis.

Re-ankylosis being one of the common complications in ankylosis surgery needs careful follow up and adequate interposition materials and some adjuvant medication to prevent the same.

Indomethacin is one of the drugs which has ectopic bone formation properties which had been used as an adjuvant during the post ankylotic surgery.

This poster highlights our experience with indometarin in TMJ ankylosis.

Documented evidence, dose and complications review and long term follow up is presented.

Abstract No: 0590

USG and MRI in TMJ Disorders: Assessment

Dr. P V L Sampada

Bapuji Dental College and Hospital Davangere

Abstract

Introduction

The increased prevalence of Temporo mandibular disorders (TMD) requires for searching for newly accessible diagnostic methods.in addition to routine clinical examination, various methods of imaging Temporo mandibular joint (TMJ) are available such as mri ct or scintigraphy.

Materials & Method

Clinical symptoms commonly manifest very late in patients with temporomandibular disorders while imaging diagnostic technique such as MRI ultrasonography can detect degenerative changes and disc dislocation at an earlier stages of the condition.

The arrival of mri with excellent resolution for the diagnosis of TMJ alterations that it had allowed the analysis of soft part of the joint as well as its lining cartilage and articular disc.

Discussion

It is also gold standard for evaluation of intracapsular disorders.

Usg has been suggested as an diagnostic method for viewing the joint in continuum without invasion discomfort alteration of the patients normal head position and interference with condylar motion preoperatively and postoperatively.

Higher frequency ultrasound has been an interesting diagnostic technique to assess the number of joints being involved.

Nevertheless there is a need for cheap non invasive simple diagnostic technique for imaging the TMJ.

Conclusion

Thus mri and ultrasonography seems promising both due to technical advantages that provide increasingly more powerful transducers as well as some of the findings of research conducted so far.

Abstract No: 0603**Management of TMJ ankylosis using kabans protocol - a series of 35 patients**

Dr. Geetanjali Arora, Saikrishna D,Sujeeth Shetty, Shyam Sundar

JSS Dental College and Hospital, Mysure

Abstract**Introduction**

Ankylosis is most commonly associated with trauma,local or systemic infection,or systemic disease. It results in considerable secondary functional and esthetic disabilities depending upon the age of its onset and degree of involvement. Many techniques for treatment of ankylosis have been described so far. However,most accepted and successful is kaban's protocol.

Aim and objective

the purpose of the study was to infer the amount of functional correction achieved using the kabans protocol and factors influencing its result.

Material and Method

A retrospective clinical evaluation of 35 patients treated for this disorder showed that 26 patients had unilateral and 9 had bilateral ankylosis. From the surgical perspective, gap/interpositional arthroplasty using temporalis fascia/muscle and reconstruction of ramus condylar unit(RCU) with resected ankylotic mass,hyperplastic coronoid,subsigmoid osteotomy,-costochondral,iliac graft was done. The degree of mouth opening monitored as the maximum interincisal distance(IID) postoperatively.

Result

In 16 patients, IID > 40 mm achieved after ipsilateral coronoidectomy with interpositional arthroplasty whereas,in 4 patients contralateral coronoidectomy was also done. Reconstruction of RCU using costochondral graft was done in 8 patients.

Abstract No: 0605**Double Sure Technique for TMJ Subluxation**

Dr. Raja Sethupathy Cheeman. S, Dr.Elavenil.P, Dr. Sasikala, Dr.Krishna kumar Raja.V B

SRM Dental College, Ramapuram

Abstract

Recurrent subluxation of temporomandibular joint can be a debilitating and in some cases even a crippling condition requiring surgical intervention.

Multifactorial etiology have resulted in diverse treatment options, both conservative and surgical procedures have been advocated with varying degree of success.

The etiological factors include trauma, neurological disorders, in-coordination of muscle movements, small size of the condyle and shallow articular eminence etc.

Symptomatic subluxation may become progressively worse and nontreatable by conservative therapies such as limiting the mouth

opening, short periods of intermaxillary fixation (IMF), and intra-capsular injection of sclerosing agents etc.

The choice of treatment for such cases are surgical procedure. Though numerous surgical procedures have been designed, the options depend on age, gender, duration of problem, clinical signs and symptoms, and general condition of the patient.

We present a case of subluxation of TMJ treated with both Dau-treys procedure and glenotemporal osteotomy to ensure stability of the treatment.

Abstract No: 0732**Condylar hyperplasia:a case report**

Dr. Rakhil R

Government Dental College and Research Institute

Abstract**Introduction**

Condylar hyperplasia of mandible is overdevelopment of condyle unilaterally or bilaterally leading to facial asymmetry.

Materials & Method

The pathological condition is diagnosed clinically or radiographically. In addition bone scintigraphy should be performed to evaluate the active degree of condylar hyperplasia.

Discussion

Mandibular deviation, malocclusion and tempromandibular dysfunction. There are many suggested etiologies of condylar hyperplasia, including neoplasia, trauma,infection, abnormal condylar loading, hormonal influence, heredity, and aberrant growth factors.

Result

The differential diagnosis of condylar lesions generally includes condylar hyperplasia, giant-cell tumor, fibro-osteoma, myxoma, fibrous dysplasia, fibrosarcoma, chondrosarcoma, osteoma, chondroma, and osteochondroma.

The histology of the affected condyle commonly resembles a normally growing condyle without any notable pathologic abnormalities. Surgical methods done are condylectomy or condylectomy along with orthognathic surgeries.

Usually, orthodontic treatment is necessary before or subsequent to surgery.

A case report of right condylar hyperplasia diagnosed and treated at government dental college and research institute bangalore is presented here.

Abstract No: 0743**Temporomyofacial flap in management of tmj ankylosis: a case report**

Dr. Routhu Sai Bhavana

Gitam Dental College and Hospital

Abstract**Introduction**

Ankylosis presents unique problems because of the integral and complex role the TMJ plays in establishing and maintaining proper form and function within the stomatognathic system.

The TMJ not only acts as a secondary growth center for the mandible in pre puberty, but also is essential to the functions of mastication, speech, airway support, and deglutition.

Materials & Method

The temporalis muscle flap was seen to be an ideal inter positional material due to its close proximity to the site.

Good vascular supply, ease of access to the condyle area minimal risk of nerve damage. And decreases need for rigorous physiotherapy.

Case Report

This is a case report of a 13 year old female patient who was reported with a chief complaint of difficulty in mouth opening since 8 years.

She had a history of trauma 8 years ago. Mouth opening was restricted to 10 mm.

After radiographic investigations the condition was diagnosed as right TMJ bony ankylosis. She got treated with right temporo myofascial interpositional gap arthroplasty and bilateral coronoidectomy. Intraoperative mouth opening of 45 mm is achieved.

Post-operative aggressive physiotherapy was conducted.

References

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Abstract No: 0747

Role of mandibular distraction in osa secondary to tmj ankylosis

Dr. Mubashir Younis, Dr. Ajaz Ahmed Shah, Dr. Muneet Kapoor

Govt. Dental College Srinagar

Abstract

Introduction

Temporomandibular joint (TMJ) ankylosis is one of the important contributing factors to the obstructive sleep apnea (osa).

Due to associated mandibular retrognathism. Such patients suffer from number of apneic or hyponeic events during sleep, snoring and daytime sleepiness.

facial asymmetry is also present in most of the patients.

Aims and Objectives

The purpose of my study was to assess the role of mandibular distraction for managing osa secondary to TMJ ankylosis.

Materials and Methods

15 patients with moderate to severe osa (ahi > 15 events/hour) due to mandibular retrognathia secondary to TMJ ankylosis were included in the study.

Pre-operative lateral cephalogram, polysomnography were done and oxygen saturation was noted in all patients. Bilateral mandibular distraction was carried out in all the patients and mandibular advancement was done depending on how much mandible was receding.

Later cephalogram and polysomnography were repeated after 3 months and oxygen saturation was also noted. After 6 months TMJ ankylosis was released and distractors were removed.

Results

The range of mandibular advancement was from 16 to 25 mm, with a mean of 18.6 mm on right side and 19.3 mm on left side.

Post distraction osteogenesis polysomnography showed that all patients were free of OSA and mean ahi improved from 48.2 to 6.3 events/hr.

Posterior airway space was calculated from lateral cephalogram which showed an increase from an average of 5.6 mm to 9.5 mm.

Average minimum oxygen saturation was 73.4% prior to distraction and improved to a mean of 84.4% post distraction.

Conclusion

Distraction osteogenesis is an effective surgical technique in the management of OSA, secondary to TMJ ankylosis.

This modality not only treats the osa but also corrects the facial asymmetry at the same time.

Abstract No: 0780

Interpositional dermal fat gap arthroplasty in tmj ankylosis

Dr. Dowlin David

Saveetha Dental College and Hospital

Abstract

Introduction

Temporomandibular joint ankylosis poses a significant challenge because of high recurrence and technical difficulties.

Patient showed zero mouth opening with facial asymmetry, bird facies, prominent ante gonial notch.

Materials & Method

Patient gives a history of trauma at the age of 7 years and operated at the age of 12 years.

radiographic examination revealed absence of normal TMJ anatomy with bony ankylotic mass.

Gap arthroplasty using interpositional dermal graft on right side and coronoidectomy on the left side TMJ. Intraoperative mouth opening of 40 mm was achieved.

Results

Physiotherapy was commenced after 5 days post operatively and continued to maintain the improved mouth opening.

Abstract No: 0784

Current concepts in treatment of temperomandibular joint ankylosis

Dr. MOHAD NIRANJALA GANGADHAR

MGPGI

Abstract

Introduction

Temperomandibular joint ankylosis is a pathologic condition where the mandibular condyle is fused with the fossa by bony or fibrotic tissue.

Etiology: multiple factors like trauma, arthritis, infection, previous TMJ surgery, congenital deformities, idiopathic factors or iatrogenic causes are considered as etiologic for TMJ ankylosis.

Treatment

The management goal in TMJ ankylosis is to increase the patients mandibular function, correct associated facial deformity, decrease pain, and prevent reankylosis. Multiple surgical modalities have been proposed to manage TMJ ankylosis including condylectomy, gap arthroplasty, interpositional arthroplasty, and total joint reconstruction.

Controversies

Autogenous tissues, such as ear cartilage, temporalis muscle flap, dermis, fat, and bone, have been used after gap arthroplasty to reduce recurrence. Alloplastic materials, such as proplast Teflon (vitek, houston, tx) and silastic, have also been used, but with high failure rates.

Concepts

Along with the traditional surgical treatment of TMJ ankylosis, distraction osteogenesis has also been used and added up to the internationally accepted kabans protocol and also the modification of kabans protocol for TMJ ankylosis in children. Here instead of the reconstruction with costochondral graft, distraction osteogenesis was used as the 5th step to improve the growth in sagittal, transverse and axial plane and the thus to enhance function and aesthetic. In patient with triad of ankylosis.

Sleep apnea syndrome and mandibular retrognathism distraction osteogenesis is suggested to be done first followed by aggressive resective surgery later.

This help in improvement of TMJ movements and aesthetic postoperatively.

Recent study suggest the use of a osteoclastic drug followed by gap arthroplasty to reduce the recurrence of TMJ ankylosis.

Conclusion

The surgical treatment of ankylosis is challenging, thorough knowledge of all the treatment concepts will help to give better results and prevent recurrence.

Abstract No: 0794

Use of subdermal fat in bilateral tmj ankylosis

Dr. Ankita Bajaj

Institute of Dental Sciences

Abstract

Introduction

Background Temporomandibular joint (TMJ) ankylosis is a disabling condition of the masticatory system with common etiological factors such as trauma, infection & pathology in the joint or systemic diseases which leads to functional and esthetic facial deformity.

Materials & Method

Treatment goals are to allow nearly normal TMJ movement, growth, restore symmetry & occlusion.

Case Report.

A 7 years old female patient with bilateral TMJ ankylosis due to trauma having maximum interincisal opening of 2 mm underwent interpositional arthroplasty with a autogenous subdermal fat graft procured from periumbilical/abdominal region.

Results

The average interincisal opening improved to 26 mm after 6 months with no reoccurrence of ankylosis.

Conclusion

In this case we found that the use of the autogenous sub dermal fat as interpositional graft material is an effective procedure for the prevention of re ankylosis following surgical release of TMJ ankylosis.

References

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Abstract No: 0826

Ultrasonography a diagnostic tool

for temporomandibular joint internal derangement? a double blind study

Dr. Sherish M Mathew, Dr. Chitra Chakravarthy, Dr. Ravi Patil, Dr. Shiva Raj

Navodaya Dental College

Abstract

Introduction

Temporomandibular joint (TMJ) is a unique joint as it is the only movable joint in the craniofacial region. Internal derangements are the most common form of temporomandibular joint disorders.

Ultrasonography enables dynamic visualization of the soft-tissue structures of the TMJ. Bias are common in studies where the examiner is aware of the medical condition of the patient.

Aim

To identify the presence of TMJ internal derangement using ultrasonography.

Objectives

To study the efficiency of ultrasound as a diagnostic tool in identifying internal derangements in TMJ by determining the distance between the articular capsule and mandibular condyle in asymptomatic and symptomatic samples through a double blind study.

Materials and methods

Randomly selected 10 samples with and without TMJ symptoms (clicking sound, pain) were enrolled for the study.

The study was a double blind study where the radiologist was unaware of the TMJ condition of the samples and was examined.

Method of examination a bilateral ultrasound scan of the TMJ was performed for each patient in the study group and control group in closed and open mouth position.

Transducer was positioned on the skin surface of the TMJ in a transverse direction running parallel to the camper line.

In each scan, the radiologist measured lateral capsule condyle distance (lccd) and anterior capsule condyle distance (accd).

Results

ACCd and LCCD showed significant difference in comparison with normal and symptomatic joints. Accd and lccd was more in normal joint.

Conclusion

Results of this study indicate that ultrasonography can be a reliable diagnostic mode for the assessment of TMJ internal derangement.

Reference

1. Ultrasonographic evaluation of disc displacement of the temporomandibular joint compared with magnetic resonance imaging. Nilfer Akir-zkan, phd,* Bas, ar sarikaya

Abstract No: 0868**Versatility of temporalis muscle flap in temporomandibular joint ankylosis***Dr. Chandhini Asokan**Sree Balaji Dental College***Abstract**

Ankylosis of TMJ causes difficulty in mastication, speech, appearance and hygiene.

Restoration of normal function and jaw movements in patients with temporomandibular joint (TMJ) ankylosis has been a challenge.

Various techniques have been provided for its treatment; but the results have been variable. Surgical treatment of TMJ ankylosis with interposition of temporal fascia is an effective and easy procedure for prevention of reankylosis.

The autogenous nature and proximity to the joint and adequate blood supply, allowing for a pedicled transfer of vascularized tissue into the joint area are the main advantages of the temporal fascia flap when compared with other interpositional materials.

Abstract No: 0881**Comparison of dermis fat with temporalis muscle in tmj ankylosis patient***Dr. Yashpal Choudhary, Dr. Neelam N. Andrade HOD & Dean of Nair Dental College Mumbai**Nair Hospital Dental College Mumbai***Abstract****Introduction**

Temporomandibular joint (TMJ) ankylosis is a very distressing structural condition that denies the victim the benefit of a normal diet and opportunities in careers that require normal speech ability.

This ailment is caused by various factors including trauma, systemic and local inflammatory conditions and iatrogenic causes such as cytotoxic medication, repeated TMJ surgery and irradiation, which can only be relieved by surgical intervention.

Discussion

Ankylosis release is the oldest form of TMJ surgery which consisted of simple bone division to separate the ramus from the cranial base. However, because of the high recurrence rate of ankylosis after simple bone division, osteoarthrectomy and gap arthroplasty were conceived in an effort to reduce the recurrence rates by increasing the distance between the osteotomized bone ends of the ramus and cranial base. Today, both gap arthroplasty and interpositional arthroplasty have become the acceptable standards for the primary surgical management of TMJ ankylosis.

Results

Temporalis muscle and fascia are broadly used by many surgeons as the interpositional material. On the other hand, autologous dermis fat, buccal fat pad, full thickness skin grafts, and cartilage have also been used as interpositional grafts in the surgical management of TMJ ankylosis with varying success.

At present there is no ideal interpositional graft. The problems encountered with the present grafts apart from the above mentioned are: cartilage tends to fibrose and calcify while alloplastic implants under functional loads disintegrate and cause foreign body giant cell reactions.

This presentation will highlight a comparison between interpositional dermis fat graft with temporalis muscle in the management of TMJ ankylosis patients.

Abstract No: 0903**Role of temporomandibular sound recorder in diagnosis of tmj disorders***Dr. Pauline Paul, Dr. Srivatsa.K, Dr. Pradeep Christopher**Thai Moogambigai Dental College and Hospital***Abstract****Introduction**

Temporomandibular joint disorder is a collective term which includes dysfunction of the muscles of mastication and the temporomandibular joints.

Major classes of TMD include internal derangement, osteoarthritis and myofascial syndromes.

The symptoms range from pain, restricted mandibular movements and various noises from the temporomandibular joint during movement.

TMD are assessed clinically by measuring pain, inter-incisal distance, deviation of mandible during mouth opening and sounds.

Sounds are described as clicking, popping, crepitation, egg shell cracking are seen in cases with anterior disc displacement and degenerative joint diseases.

Materials & Methods

Various investigations for TMJ include ct for bony components, MRI for diskal tissues, arthroscopy etc. though mri is considered as gold standard in imaging for the disc components but the increased cost factor reduces the patient compliance.

Discussion

Sound analysis are effective in office diagnostic aid.

Aim of the study is to record the TMJ sounds from asymptomatic and symptomatic subjects for analysis and correlation with the clinical presentation such that the sounds can be reproduced and quantified.

The sounds are recorded using a microphone with sound recorder and amplifier.

These sounds are analysed using a spectral sound analyser for frequency range and decibel levels. Recording is done during mouth opening, closing, lateral and protrusive movements. Analysed sounds are compared with the clinical presentation of the subjects.

TMJ sound recorder can provide an alternative to conventional diagnostic aids.

References

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Abstract No: 0918

Unilateral condylar hyperplasia: a case report

Dr. Asjeet Parida

Institute of Dental Sciences

Abstract

Introduction

Mandibular condylar hyperplasia (mch) is a disorder of idiopathic origin in which pathological enlargement of the mandibular condyle is seen, usually creating significant functional and aesthetic deformities.

Slowly progressive unilateral enlargement of the head and neck of the condyle causes crossbite malocclusion, facial asymmetry, and shifting of the midpoint of the chin to the unaffected side.

The facial appearance of patients with condylar hyperplasia depends on the age during the initial stage of the disease.

Aims and Objective

Purpose of the presentation is to discuss a case with class 2 mch and its management.

Methods

A 37 year old female patient with class 2 mch was surgically treated with unilateral condylectomy of the affected side and shaving of mandibular body and ramus.

radiographs were taken both pre-operatively and post-operatively. Proper follow up was done and orthodontic treatment was started for minor corrections.

Results

objective and subjective evaluation of temporomandibular joint (TMJ) included maximal incisal opening, lateral excursions, correction of facial asymmetry, occlusal harmony, TMJ pain, and jaw function. Good mouth opening and near to normal occlusion was achieved.

Good facial aesthetics was obtained.

Conclusion

Thus, it was concluded that treatment of a case of unilateral condylar hyperplasia during the inactive phase can be treated with condylectomy and the asymmetry can be treated with shaving of the mandibular body.

It significantly improves long term surgical outcomes.

References

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Abstract No: 0928

Osteoma of condyle– a rare lesion

Dr. K. Senthil Ganesh, Professor Dr. C. Prasad, Associate Professor
Dr. Arun Kumar, Assistant Professor Dr. Kamalakannan

Tamilnadu Govt. Dental College & Hospital, Chennai

Abstract

Introduction & Background

Osteoma, a benign neoplasm of osseous structures, mostly restricted to cranio-facial skeleton, occasionally occurs in long bones, with slow & continuous growth, involving both cortical & cancellous bones.

Its occurrence is rare in temporomandibular joint [TMJ], first reported by ivy in 1927.

Osteoma is a small, oval or round tumor like lesion which is composed of osteoid & trabeculae of newly formed bone deposited in a substratum of highly vascularised connective tissue.

Osteoma of condyle extending into TMJ region is of cancellous type. Osteomas occurring in condyle causes enlargement of affected condyle which leads to facial asymmetry, occlusal disturbances & restricted mouth opening.

Materias & Methods

Here we present two case reports of this rare tumor of condyle with gross facial asymmetry, occlusal disturbances & restricted mouth opening, where condylectomy done & how the facial asymmetry & other disturbances got corrected.

Aims & objectives

The present poster elaborates two cases of osteomas of left condyle, with facial asymmetry, restricted mouth opening & occlusal disturbances, & discusses its pathophysiology, diagnostic methods & its surgical management & the treatment outcome.

Results

On surgical removal [condylectomy] of the lesion & some of the surrounding bone, the symptoms of facial asymmetry, malocclusion & restricted mouth opening got corrected.

Conclusion

Osteomas can occur in the condyle causing unilateral enlargement of condyle with facial asymmetry will often require surgical management to produce highly predictable, stable, functional & esthetic outcome.

References

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Abstract No: 0941

Temporomandibular dysfunction after orthognathic surgery

Dr. Daksh Goel

ITS Dental College

Abstract

Introduction

Temporomandibular dysfunction after orthognathic surgery background temporomandibular joint disease manifesting in a variety of symptoms, also can apply abnormal stress to mandibular condyles and

affect its growth pattern of mandible. Thus, adaptive developmental changes on mandibular condyles and post-developmental degenerative changes of mandibular condyles can create alteration on facial skeleton and occlusion.

Methods

The changes of facial skeleton in dentofacial deformity patients following orthognathic surgery have an impact on TMJ, masticatory musculature, and surrounding soft tissues, and the changes of TMJ symptoms. Maxillofacial surgeons must remind that any surgical procedures involving mandibular osteotomy can directly affect TMJ symptoms,

Thus pre-existing TMJ symptoms and diagnoses should be considered prior to treatment planning and orthognathic surgery.

Aim

We sought to evaluate the treatment results of orthognathic surgery on temporomandibular joint.

This is a case of 19 year old female patient who underwent a bimaxillary osteotomy and genioplasty for correction of dentofacial deformity. Pre- and postoperative cephalometric and orthopantomographic radiographs along with occlusion of patient were analysed and a diagnosis of progressive condylar resorption was made after a follow up period of over 2 years.

Conclusion

The esthetic outcome and chewing ability are generally improved just after orthognathic surgery. However temporomandibular joint disorders mainly condylar resorption occur after surgery and causes relapse and decreases patients satisfaction in the long run.

That's why patient should be given explicit preoperative information on the risk of temporomandibular joint disorders as the ways to prevent them have not yet been established.

Abstract No: 0962

Prolotherapy: The future of TMJ disorder treatment

Dr. Akash Bhatt

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Abstract

Introduction

Proliferation therapy, or prolotherapy, is also known as regenerative injection therapy (rit), that mimics the natural healing process of body by initiating a local inflammatory response.

It is used in osteoarthritis, low back pain and tendinopathies. With recent advancement in stem cell therapy and regenerative medicine, prolotherapy will play a greater role in treatment of TMJ disorders.

Objective

The aim of the current review is to give an insight about the prolotherapy technique and its use in the treatment of temporomandibular joint disorders.

Method

It involves a single injection or a series of injections, often dextrose diluted with a local anaesthetic.

Therapeutic solutions are injected at the sites of painful and tender ligament and in the adjacent joint spaces. Two to six treatment sessions are required over 2–12 months to reach the maximum effect.

After the injection, patients should be encouraged to be active and move the injured area.

Results/findings

The result demonstrates that prolotherapy helps to decrease pain and improve the quality of life of patients with chronic temporomandibular joint symptoms.

Prolotherapy leads to relevant improvements in patients TMJ range of motion, sleep, depressive and anxious feelings.

Conclusion

Prolotherapy is a treatment modality that provides a long-term solution rather than just palliation. It should be considered in appropriate patients prior to resorting to long-term narcotic therapy or surgical intervention.

Prolotherapy may become a safe and effective treatment for TMJ pain in future.

References

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Abstract No: 0967

Temporomandibular Joint Replacement

Dr. Nidhi Soni

Rungta College of Dental Sciences and Research, Bhilai, Chhattisgarh

Abstract

Introduction

Temporomandibular joint (TMJ) disorder (TMD) is a collection of medical and dental conditions affecting the joint and muscles of mastication, as well as contiguous tissue components.

This leads to pain and altered oral function and can lead to a poor quality of life.

Management of TMD is often simple in the first instance, but may involve complex decision making. The total temporomandibular joint (TMJ) replacement system is implanted in the jaw to functionally reconstruct a diseased and/or damaged temporomandibular joint.

Methods

The total TMJ replacement system is a two-component system comprised of mandibular condyle and glenoid fossa components.

Both components are available in multiple sizes as right and left side specific designs and are attached to the bone by screws.

Discussion

The total temporomandibular joint replacement system is indicated for reconstruction of the temporomandibular joint. The reconstruction is necessary due to one of the following diagnoses

Arthritic conditions: osteoarthritis, traumatic arthritis, rheumatoid arthritis, ankylosis including but not limited to recurrent ankylosis with excessive heterotopic bone formation.

Revision procedures where other treatments have failed (e.g. alloplastic reconstruction, autogenous grafts), avascular necrosis, multiply operated joints, fracture, functional deformity, benign neoplasms malignancy (e.g. post-tumor excision) degenerated or resorbed joints with severe anatomic discrepancies developmental abnormality in this poster i am going to throw some light on the use of 3d prosthesis for temporomandibular joint replacement.

Abstract No: 0990
Eminectomy vs sclerosing agents in chronic recurrent dislocation

Dr. Chandrashekar V

Sri Rajiv Gandhi College of Dental Sciences & Hospital

Abstract

Introduction

Dislocation of the temporomandibular joint is not an uncommon condition. It may be unilateral or bilateral and can be acute, recurrent & rarely chronic.

Acute Temporo mandibular joint (TMJ) dislocation is common in clinical practice & can be managed easily with manual reduction. Chronic recurrent TMJ dislocation is a challenging situation to manage.

Reduction method may vary on the basis of the severity of the injury and whether it is an acute or chronic dislocation. The medical management includes autologous blood injection, sclerotherapy, botulinum toxin, proliferation treatment, arthroscopy and lateral pterygoid myotomy. The surgical management includes eminectomy, titanium miniplates, interposition autologous grafting, alloplastic/allograft block incision, sagittal split/vertical ramus osteotomy, dautreys procedure, and wolfords procedure.

The aim of eminectomy is reducing vertical height of the articular eminence. The procedure is typically completed using standard endaural or pre-auricular incision with temporal extension. Dissection is carried to the superficial layer of the deep temporal fascia.

The fascia is incised with anterior release as needed (extending obliquely antero-superiorly at 45 degrees angle so as to minimize trauma to the temporal branch of the facial nerve).

At this point the periosteum is incised on the zygomatic arch & dissection is carried anteriorly to the level of the eminence.

The eminence is then reduced to its medial margin with burs, osteotome or combination. This poster depicts the medical versus surgical management of chronic recurrent dislocation with examples of treated cases.

Abstract No: 0996
Management of RE RE - Ankylosis of TMJ

Pacific Dental College and Hospital

Dr. Madhani Bhavin Ratilal

Abstract

Introduction

Temporomandibular joint (TMJ) ankylosis results in a limitation of the mouth opening. This disorder can result in an array of problems with diet, facial deformity, and poor oral hygiene.

Case Report

In this case report, 28 year old male patient with chief complaint of nil mouth opening since 8–10 years, with history of fall from height at the age of 2–3 years.

Patient was operated twice for left TMJ ankylosis initially at the age of 11–12 year and again at the age of 17–18 years.

Surgery was planned for re re left TMJ ankylosis with treatment plan of gap arthroplasty with coronoidectomy. Ankylosed site of TMJ

was exposed using pre-auricular alkayat bramley incision and gap arthroplasty with coronoidectomy was done.

Intra-op mouth opening 28 mm was achieved.

Conclusion

Ankylosis of TMJ is of clinical importance which need proper intra op as well as post op care along with active physiotherapy with which patient achieves adequate mouth opening and therefore proper nutritional statues can be maintained.

Key words: temporomandibular joint, ankylosis, gap arthroplasty, coronoidectomy.

Abstract No: 0999
Treatment of recurrent TMJ dislocation by autologous blood injection

Dr. Sourav Majhi

K D Dental College and Hospital

Abstract

Introduction

Treatment of recurrent dislocation of temporomandibular joint by autologous blood injection.

Introduction

Dislocation of the temporomandibular joint is defined as the movement of the condyle out of glenoid fossa and excessive advancement of the posterior surface of the condyle anterior to the articular eminence.

Autologous blood injection around articular cavity is one of the latest conservative treatment for recurrent TMJ dislocation.

Objective

To evaluate the efficacy of autologous blood injection in the management of recurrent TMJ dislocation so as to overcome the risk factor of surgical procedure.

Methods

a line drawn from middle of tragus to lateral canthus of eye and a point marked 10 mm anterior and 2 mm inferior to the line.second point marked 20 mm anterior and 10 mm inferior to the canthotragal line.

After preparing the site using lignocaine,an auriculotemporal nerve block given.then one needle inserted at first point to a depth of 1 inch and stabilized.another needle inserted at second mark corresponding to articular eminence.after inserterting of needles.

Arthrocentesis is done using normal saline solution.after lavage second needle withdrawn and autologous blood taken from cubital vein is injected in articular fossa through first needle,and the same blood injected around pericapsular tissue.after this an elastic bandage is applied.

Result

Though there is chance of recurrence,this procedure can successfully control the repeated dislocation and reduce the risk factors related to surgical procedures which improve the clinician and patients acceptance to a satisfactory level.

Conclusion

Its simple, safe, cost effective procedure and can be tried prior to performance of more invasive surgical intervention.

Abstract No: 1021
Dautrey's procedure: an alternative for treatment of recurrent mandibular dislocation

Dr. MR. Ramu T

Govt Dental College; RIMS; Kadapa A.P

Abstract

Temporomandibular joint (TMJ) dislocation is defined as an involuntary forward movement of the mandible beyond the articular eminence with the condyle remaining stuck in the anterior-most position, leaving the patient unable to close the mouth.

It may occur in an acute or chronic form.

Case report

A female patient of age 50 years came to the department with a history of recurrent episodes of TMJ dislocation since 5 years. patient gives history of few episodes of dislocation which were reduced manually by a general physician.

Patient was treated with a down-fracture of the zygomatic arch, known as dautrey's procedure, and modified by the application of a miniplate connecting the displaced arch and the lateral portion of the articular eminence.

The postoperative results were good without any functional limitations or recurrence.

Abstract No: 1031
Temporalis myofascial flap in treating tmj anylosis - a case series

Dr. D Sumanth Saketh, A Mercy

Govt Dental College & Hospital RIMS, Kadapa

Abstract

Introduction

Temporomandibular joint (TMJ) ankylosis is defined as a situation in which the mandibular condyle is fused to the glenoid fossa by bone or fibrous tissue by causing loss of function of the joint.

Temporomandibular joint ankylosis is a structural disease that can cause asymmetry resulting in severe facial disfigurement as well as difficulty in eating, breathing and speech.

Discussion

Trauma and infection are considered as the major causes of ankylosis. Management is mainly through surgical intervention and it is necessary to use an inter-positional material to prevent re-ankylosis.

The most commonly used interpositional material is temporalis myofascial flap.

Advantages of the temporalis myofascial flap include its autogenous origin and close proximity to the midface without involving an additional surgical site.

Three patients were treated in the department of oral and maxillofacial surgery with temporomandibular joint anylosis using temporalis myofascial flap.

The mouth opening and range of motion were increased post operatively. The results were satisfactory to all the patients.

Abstract No: 1054
TMJ TJR

Dr. Ravinder Pal Singh rana

Armed Forces Medical College

Abstract

Introduction

Alloplastic temporomandibular joint replacement (TMJ TJR) presents unique problems due to the integral and multifaceted roles this joint plays within the stomatognathic system to establish and maintain appropriate mandibular function and form.

The TMJ not only acts as a secondary mandibular growth center pre-puberty, but is also crucial in maintaining proper mastication, speech, airway support and deglutition. Further, these essential life functions place the TMJ under more cyclical loading and unloading than any other body joint over a lifetime.

Discussion

Therefore, when TMJ tjr is indicated the device chosen must be able to provide long-term mandibular function and form outcomes. End-stage TMJ pathology accompanied by physiological function and anatomical form distortions dictates the need for replacement.

Due to the complex nature of joint related masticatory muscle functional and anatomical associations, it is unreasonable to expect an autogenous reconstructed TMJ or an alloplastic replaced TMJ can be returned to normal pre-morbid function.

Conclusion

Therefore, as is understood with any orthopaedic joint replacement, patient and surgeon must agree and accept that there will always be some functional disability involved with.

Any reconstructed or replaced TMJ. Further, in the multiply operated, anatomically distorted patients, chronic neuropathic centrally mediated pain will always be a major component of their disability.

Therefore, it is imperative that surgeon and patient understand that the primary goal of any TMJ tjr is the restoration of mandibular function and form and that any pain relief must be considered as only a secondary benefit to the patient.

Abstract No: 1060
Surgical management of right temporomandibular joint dislocation in a seropositive patient - a case report

Dr. Vaibhav D Raut, Dr.Sanyukta Raut

Dr. D.Y. Patil Dental College & Hospital Pimpri Pune

Abstract

Introduction

Temporomandibular joint (TMJ) is a bilateral synovial articulation between the condyle of the mandible and glenoid fossa of the temporal bone.

In certain situations, when the condylar head goes beyond the glenoid fossa in either an anterior, posterior, medial, lateral, or superior direction, a TMJ dislocation results. TMJ subluxation and dislocation though uncommon, accounting for less than 3% of all

reported dislocated joint in the body, and are very unpleasant and distressing conditions to patients.

Case report

A 56-year female patient reported to our department with a complaint of inability to close mouth since 2 months. Examination revealed that the right condyle was dislocated from the glenoid fossa.

Orthopantomogram showed that right condyle was dislocated out of the glenoid fossa and was situated anterior to articular eminence.

Initially, conservative management was attempted but in vain. Hence, a surgical management was planned under general anaesthesia. routine investigation were within normal limits except for hiv. Nasoendotracheal intubation done and scrubbing painting and draping done as per the instruction of a high risk patient.

Pre-auricular incision marked and made then sharp and blunt dissection done preserving the vitals structure and the TMJ is exposed.

The condyle was positioned back again in the glenoid fossa, occlusion was achieved and maxillomandibular fixation (MMF) was done.

Haemostasis was achieved and closure was done. MMF was kept for 3 weeks and the guiding elastics were given.

Conclusion

TMJ disorder treatment should be done as early as possible to achieve good results and avoid any complication. Persistent dislocation longer than 4–5 weeks conservative management is less likely to be successful.

Abstract No: 1071

TMJ disc reposition with mitek mini anchors a clinical experience

Dr. Jithin P, Dr Ajoy Roy Choudhury, Dr Ongkila Bhutia, Dr Rahul Yadav

All India Institute of Medical Sciences

Abstract

Introduction

TMDs are one of the most challenging conditions to treat in the facial region.

Disc displacement without recapture requires open surgical intervention to reposition the disc to its normal position.

this case series involves management of 10 such joints using mitek mini anchors.

Aims and Objectives

To compare mio, vas score, clicking, movements of condyle in TMJ open and closed views during the preoperative and postoperative follow up period.

Materials and Methods

10 TMJs in 8 patients (6 unilateral and 2 bilateral) with mri proven add without recapture, refractory to all non surgical management options, were operated for TMJ disc repositioning with mitek mini anchors and followed up (mean-8 months) for evaluation of mio, vas scores, clicking, facial nerve function and movements of condyle in TMJ views.

Results

10 TMJs with add without recapture were treated with disc repositioning using mitek mini anchors and followed up.

Pre operative mean mio was 10.03 mm which improved to 26.17 mm in the follow up period. VAS score showed significant improvement from mean score of 6.33 to 2.

One patient had transient temporal nerve weakness which recovered completely in 3 months post operatively. Clicking was present in two of the patients of which one persisted postoperatively.

Condylar movements showed improvement in TMJ views.

Conclusion

Disc repositioning with mitek mini anchors shows predictable results in management of add without recapture in terms of reduction of pain and improvement in mio. This technique provides the added advantage of dynamically maintaining the position of the disc in relation to condyle during mandibular movements compared to other conventional disc plication procedures where disc is being tied to other stationary structures.

Abstract No: 1088

Advances in TMJ Reconstruction

Dr. Ruchira Shukla, Dr.Gaurav Singh, Dr.Madan Mishra

Sardar Patel Post Graduate Institute of Dental & Medical Sciences, Lucknow

Abstract

Introduction

Reconstruction of irreparably damaged TMJ is dependent on etiology of damage and patients age in childhood.

Current preference is autogenous reconstruction which potentially grows with child. Occurrence of growth failure, can be dealt in late adolescence with either osteotomy, distraction osteogenesis or replacement of condylar component of prosthesis.

In adults alloplastic reconstruction is currently treatment of choice as this gives more stable long term result, facilitating early mobilisation.

Initial cost is expensive but when weighed against reduced length of stay, reduced morbidity, often costs are equivalent in short term.

Objectives

Restore mandibular form and function; reduce suffering, disability, morbidity, disease progression whilst preventing excessive treatment cost. This is complicated by disease progression and previous surgical interventions.

Methods

Autogenous grafts can be harvested using interposition graft (temporalis fascia), local osteotomy, distraction osteogenesis, non-vascularised (costochondral, sternoclavicular), vascularised (metatarsal) & for alloplastic grafts material like metal on metal joint replacement system, metal on high molecular weight polyethylene joints or titanium material, custom made prosthesis in combination with autogenous peri-implant fat grafting are used.

Result

Alloplastic total joint replacement, now considered as gold standard in reconstruction of irreparably damaged adult TMJ, for which currently we have long follow up with good outcome. But there are chances of graft rejection due to allergy for material used.

Benefit is less hospital stay, no IMF required, no donor site morbidity. Although development of custom made cartilage grafts using stem cells might be way forward for all types of joint reconstruction in future.

Conclusion

Autogenous replacement favourable in children and alloplasts in adults. Distraction osteogenesis is explored though their long term outcomes not available. Newer techniques of cartilage reconstruction may ultimately surpass current reconstruction modalities.

Abstract No: 1092**Recent concept in management of tmjs***Dr. Sukriti Nagar**Guru Nanak Dev Dental College and Research Institute, Sunam, Punjab, 148028***Abstract**

Disorders of temporomandibular joint (TMJ) may clinically present with jaw pain and restricted mouth opening that may limit a patients quality of life and access to comprehensive dental care. A multidisciplinary approach is essential in fundamental care of all TMD patients so that the treatment can be specifically tailored to individual patient needs.

At present, a conservative treatment prevails over surgery, given it is less aggressive and usually results in satisfactory clinical outcomes in mild to moderate temporomandibular disorders (TMDs).

this poster presentation is aimed to evaluate recent evidence, identify challenges and propose solutions from a clinical point of view for patients with craniofacial pain and TMD.

Abstract No: 1095**Pseudo ankylosis of right tmj - a case report***Dr. Amanat Kaur Dhaliwal, Dr. Vivek Shah**ITSS CDSR Muradnagar***Abstract****Introduction**

Temporomandibular joint is that joint which connects the mandible to the skull and also known as ginglymodiarthroidal joint.

There are many diseases that can take place in TMJ and ankylosis is one of them. Ankylosis is a greek word meaning stiff joint.

According to kazanjiaan TMJ ankylosis can be classified as true ankylosis (intra articular) that is, which affects the joint and false ankylosis (extra articular).

Case report

In this case a 16 year old female came with chief complaint of limited mouth opening since 2–3 years. On examination chin deviated towards the right side and mouth opening was 17 mm.

A provisional diagnosis of fibrous ankylosis of right TMJ was given. Orthopantomogram and cone beam computed tomography was advised and cbct revealed that the ankylosis was extra capsular (at around sigmoid notch) that is pseudo ankylosis.

The treatment plan was gap arthroplasty of right TMJ followed by active physiotherapy. Patient was planned for surgery.

Alkayat bramley incision was given, TMJ was exposed pseudo ankylotic mass was removed using piezo surgery unit, capsule was sutured back and the intraoperative mouth opening of 41 mm was achieved and layered closure was done followed by active physiotherapy postoperatively. 3 months postoperative mouth opening was 35 mm.

Abstract No: 1097**Management of TMJ Ankylosis in Old Patient***Dr. Ankita Dahiya**Krishnadeveraya College of Dental Sciences***Abstract**

TMJ ankylosis is usually in early years of life.

However the treatment may get delayed in some instances due to various reasons.

Case Report

A case of 65 years old lady edentulous with bilateral TMJ ankylosis, challenges faced in rehabilitation of this patient.

Methods;

Distraction followed by interpositional gap arthroplasty.

Conclusion

Surgical management in TMJ ankylosis results in adequate mouth opening but active and vigorous physiotherapy in both immediate and later post operative days can prevent reankylosis.

Reference

1. Peter Ward Booth, Fonseca, Peterson

Abstract No: 1100**Evaluation of mandibular growth after tmj ankylosis release without growth centre transplantation***Dr. Uday Sagar Sandepogu, Dr. Raja Sekhar**Narayana Dental College and Hospital***Abstract****Introduction**

Temporomandibular joint ankylosis is a debilitating condition mainly affecting the children. That is characterized by bony fusion of the mandibular condyle with glenoid fossa resulting in restriction of mandibular range of motion.

Untreated ankylosis adversely affects the function as well as growth of the mandible leading to gross facial asymmetry. The role of condyle in mandibular growth has been widely studied and reported.

Aim

The aim of the study is to test the hypothesis that mandibular growth resumes once the ankylosis is released in childhood, without growth-centre transplantation.

Patients and Methods

A retrospective clinical case record study was conducted on children of less than 10 yrs operated in our department for temporomandibular joint ankylosis between jan 2002 to aug 2015 by radiographic assessment of mandibular growth using standardised bony landmarks like articulare to gonion(ar to go) and gonion to pogonion(go to pg) on pre operative and post operative orthopantomograms of patients who were recurrence free & had an average follow up period of 3 years.

Results

Radiographically, there was increase in ramus height & body length of the mandible on the ankylosed side post operatively, suggesting that mandibular growth had occurred after ankylosis release even without growth centre transplantation.

However, compensation of the pre existing growth deficit had not occurred & preexisting mandibular asymmetry persisted.

Conclusion

Growth of mandible resumes after the ankylosis release,

But the asymmetry remains uncompensated. In management of temporomandibular joint ankylosis pre operative facial asymmetry is to be considered, if the asymmetry is non existent, one has to consider ankylosis release and if the asymmetry is severe distraction of affected side may be required alongwith or after ankylosis release.

Abstract No: 1101**Navigation surgery in TMJ ankylosis**

Dr. Abhishek Mishra

Armed Forces Medicalcollege, Pune

Abstract

Navigation in surgery is an important example of today's technological capabilities being applied to medicine.

It has emerged as one of the most reliable representatives of technology as it continues to transform surgical interventions into safer and less invasive procedures.

The aim of this poster is to provide a current development of navigation-guided oral and maxillofacial surgery including surgical planning, simulation and navigation in temporomandibular joint ankylosis case.

Abstract No: 1110**Rahals technique of TMJ arthrocentesis**

Dr. Rakhy Suresh

PMS College of Dental Science and Research

Abstract**Introduction**

Temporo mandibular joint (TMJ) arthrocentesis was introduced approximately 27 years ago when Nitzan et al. (1991) described the technique of irrigation of upper compartment of TMJ with ringers lactate solution to treat limited mouth opening due to internal derangement.

It is considered as the first line of surgical treatment by many clinicians when patients do not respond to conservative therapies for TMJ disorders.

Methods & Materials

TMJ arthrocentesis is a procedure in which the intracapsular space is lavaged. It is a type of minimally invasive surgical treatment especially in patients suffering from internal derangement of TMJ.

Discussion

Improvement or reduction of symptoms is due to removal of chemical inflammatory mediators and a change in the intra articular pressure.

there are two techniques of TMJ arthrocentesis, one is the double needle technique and the later modified rahals technique or single needle technique.

The main aim of this poster presentation is to find out the effectiveness of arthrocentesis in TMJ using single needle technique in comparison with double needle technique.

Abstract No: 1118**Efficacy and Safety of Hinds Approach**

Dr. Dhritiman Pathak, Dr Gaurav Singh, Dr Madan Mishra, Dr Amit Gaur

Sardar Patel Post Graduate Institute of Dental and Medical Sciences

Abstract**Introduction**

the management of mandibular condylar fractures has remained an enigma for oral and maxillofacial surgeons. In order to achieve anatomic reduction, it is essential to gain complete exposure of the surgical field for direct vision of the fractured ends and for mobilisation of the displaced segment. The hinds approach is described very infrequently in the literature for the treatment of subcondylar fractures.

Aim

The aim of this case series is to report the outcome of management of condylar fracture exposed using hinds approach.

Methods & materials**Case series**

20 patients with condylar fracture were treated with orif under ga. Hinds approach was used to expose the fracture site.

Good reduction and facial appearance were observed in all patients treated surgically. We did not encounter the facial nerve during the blunt dissection of the parotid tissue. All of the fractures were reduced perfectly clinically and were confirmed with either orthopantomography or computed tomography.

Mandibular function was good in all of the cases. No salivary fistula was observed. The scars were practically undetectable.

Conclusion

Approaches are chosen as per operator ease and practice. Orif of condylar fractures is often avoided by many surgeons for fear of complications and therefore it is necessary to select an approach that the surgeon is well trained in. We have found that the hinds approach is an approach that is easier to master and nerve damages can be avoided best.

Reference

1. Ebenezer V, Ramalingam B (2011) Comparison of approaches for the rigid fixation of sub-condylar fractures. *J Maxillofac Oral Surg* 10(1):38–44.

Abstract No: 1127**Arthrocentesis of Temporomandibular Joint**

Dr. Saheefa Begum, Pro.Shadab Mohammad, Prof.Divya Mehrotra, Prof.Hari Ram, Prof.Vibha singh, Prof U.S Pal, Prof.R.k Singh, Dr.Geeta Singh

King George Medical University, Lucnow

Abstract**Introduction**

Temporomandibular joint dysfunction(TMJD) is a clinically significant condition which can be a source of acute or chronic orofacial pain and dysfunction including limitation of mandibular movement, pain, with mandibular function and joint sound.

Arthrocentesis is joint lavage which washes out these inflammatory mediators, thereby, relieving pain.

Aim

The aim of study to evaluate the efficacy of arthrocentesis of temporomandibular joint followed by intra-articular injection of methylprednisolone.

Material and method

Thirty TMJ from twenty patients, aged 18–48 years (mean age 27.33 years) with clinical and radiological diagnosis of TMJd, based on clinical criteria (cdc/TMD) were included in the study and underwent arthrocentesis followed by injection methylprednisolone.

Patient evaluation was done preoperatively and postoperatively following the procedure and on 7th day, 2nd, 3rd and 4th week, 2, 3, 4, 5, 6 months.

Results

Evaluation of assisted and unassisted mouth opening showed increase at all time intervals. There was significant improvement in pain, range of motion, joint effusion and joint sound.

Conclusion

Arthrocentesis followed by intra-articular injection of methylprednisolone is safe, simple, minimally invasive and effective treatment of temporomandibular joint dysfunction.

Abstract No: 1162

Lateral gap arthroplasty for type III TMJ ankylosis - a conservative approach

Dr. Mukul Gaba

SGT Dental College Hospital and Research Institute

Abstract

Introduction

There are various surgical treatment modalities available for Temporomandibular joint (TMJ) ankylosis. However, the treatment of TMJ ankylosis poses a significant challenge because of high incidence of recurrence. Gap arthroplasty, used in the treatment of TMJ ankylosis, is challenging requiring resection of abnormal bone formation at skull base with complex and distorted anatomy. This case report evaluated lateral gap arthroplasty for type iii TMJ ankylosis.

Objective

Assessment of conservative approach using lateral gap arthroplasty for type iii TMJ ankylosis in a 8 year old female patient.

Materials and Methods

A 8 year old female reported to department of oral & maxillofacial surgery at sgt dental college & hospital, gurgaon with the complaint of limited mouth opening from last 1 year.

Past history revealed that she had a fall from roof 2 years back following which her mouth opening was gradually reduced.

There was a scar on her chin which correlated with history of trauma. After initial clinical assessment, her mouth opening was recorded as 20 mm. Radiographic examinations revealed a lack of structural organization and obliteration of left TMJ space. Based on findings, a diagnosis of type iii left bony TMJ ankylosis was confirmed which required surgical intervention.

Results

Lateral gap arthroplasty (lga) was used which involved resection of the lateral part of the ankylosed bone from the medial functional condyle. It appears to be useful in terms of maintaining the height of ramus, preserving the growth centre, achieving increased mouth opening of 35 mm postoperatively and promoting rehabilitation of mandibular functions.

Conclusion

Lateral gap arthroplasty, a conservative approach promises to be an effective technique for the management of type iii TMJ ankylosis.

Abstract No: 1174

Intra-operative identification of facial nerve

Dr. Nirmala Subramani

AJ Institute of Dental Sciences, Mangalore

Abstract

Aims & Objectives

The aim of this poster is to explain the methods of identification of facial nerve during parotid surgeries and reduce the chances of facial nerve injuries.

There has been a mention of different techniques in literature in the identification of facial nerve.

Intra operative nerve stimulators shall be discussed alongside clinical identification over the ot table. The pathways of the facial nerve are variable and a sound knowledge of the extra-temporal anatomy is needed for the accurate identification, which help in reducing the risk to the facial nerve and eliminating the complications associated with parotid surgeries.

Conclusion

No single technique can be deemed perfect. It all depends on the surgeons skill, expertise & experience. An exhaustive knowledge of the anatomy is thus mandatory.