CASE REPORT

Giant 'giant cell tumor' of pelvis

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Abstract

Giant cell tumor (osteoclastoma) of pelvis is rare entity. Most of these have average size of 9.5cm. We here present a massive osteoclastoma involving pubis and periacetabular region to such an extent that surgical excision could not be done. Our surgical intervention was aimed to correct the associated deformity and improve function by debulking the part of tumor responsible for mechanical symptoms and deformity.

Key words: Giant cell tumor, osteoclastoma, pelvic giant cell tumor

INTRODUCTION

Giant cell tumors of pelvis are rare accounting for 1.5 to 6% of giant cell tumors. These tumors are usually large with average size 9.5 cm as per literature. Treatment of these tumors is controversial and challenging. Here we present a 45 year old male who presented with a massive giant cell tumor of peviacetabular region that is static for last six years and presented with mechanical problems to to its size. Being static we only gave palliative treatment to relieve patients mechanical symptoms.

CASE REPORT

45 year old male presented with swelling along inner aspect of left proximal thigh for last 10 years. Initially it was small and progressed slowly in size for four years. For the last six years it has been static. It was not associated with any trauma, fever, discharging sinus, hematuria, hematochezia. Patient also complained of difficulty in walking for last seven years. Patient had to lurch to left side while walking. There is history of dull boring type of pain in the groin and proximal thigh for last seven years.

Access this article online	
Website: www.jscisociety.com	Quick Response Code
DOI: 10.4103/0974-5009.101861	

Examination revealed a swelling 12×10 cm, immobile, bony hard in consistency, on anteromedial aspect of proximal thigh [Figure 1]. Gait was lurching with abduction deformity of 25 degree. No inguinal lymphadenopathy.

Neurological examination of lower extremity was normal without any neurodeficit.

Radiograph revealed a calcified mass originating from left pubic rami, its body, periacetabular region and extending partly into pelvis and partly outside along medial aspect of femoral neck and proximal femoral shaft into medial aspect of thigh. The mass has a multiloculated appearance [Figure 2]. Chest radiograph did not reveal any abnormality.

Patient could not afford for CT scan and MRI scan of pelvis.

Core Biopsy taken for Histopathology had features suggestive of giant cell tumor.

Extension into proximal thigh was approached by medial approach and de-bulking of tumor was done. Histopathology of specimen reconfirmed the diagnosis. Follow up revealed correction of abduction deformity though adduction was restricted.

DISCUSSION

Giant cell tumor (GCT) of pelvis is uncommon, accounting for only 1.5 to 6% of cases of GCT.[1] In pelvis ilium is the most common site of involvement; ischium and pubis

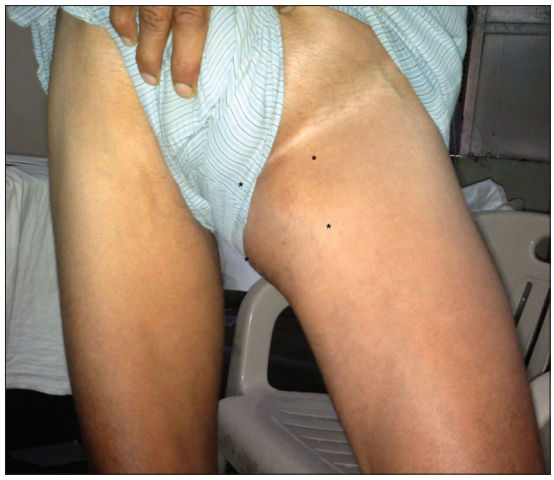

Figure 1: Bony swelling anteromedial aspect of proximal left thigh (margins if swelling marked by*) with abduction deformity of left lower extremity.

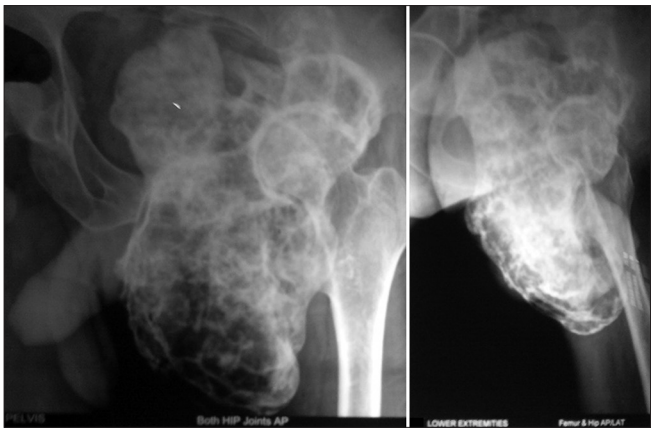

Figure 2: Radiograph left hip showing multiloculated swelling arising from pubic rami, body of pubis, periacetabular region and extending partly in pelvis and partly along medial aspect of femoral neck and proximal femoral shaft.

are less frequently involved.[2] It typically presents in adults between age of 20 to 50 with localized swelling and pain.[3] Females are slightly more affected than males.[4] Our case primarily involved pubic rami, body of pubis with periacetabular involvement and presented with swelling and deformity. Pain was dull boring in nature.

Average size of the tumor in this region is 9.5cm.[4] In our case tumor was massive and dimensions were approximately 28×18 cm. And such massive GCTs have not been mentioned in the literature.

There are different modalities of treatment of pelvic GCT. Radiotherapy has high rate of recurrence (44%) and risk of soft tissue sarcomas (12%).[5] Thus treatment should be essentially surgical which includes surgical excision. Excision can be extralesional which achieves 90% local tumor control but poor functional outcome[6] or it can be intralesional which has 90% local recurrence rate with good functional outcome.[7] In our case, tumor was so massive that extralesional excision would have resulted in severe functional impairment whereas intralesional excision would have been technically impossible with a high chance of recurrence. So we aimed at correcting the deformity and improve function with de-bulking the part of tumor causing mechanical symptoms. But patient needs regular long term follow up for local invasion, mechanical or invasive urinary and bowel involvement and distant pulmonary metastasis.

CONCLUSION

Massive GCT of pelvis, which is static, not amenable to excision and presenting with mechanical symptoms, can be managed by de-bulking the portion of tumor responsible for mechanical symptoms. And patients need to be followed for local invasion or metastasis.

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How to cite this article: Ali N, Bhat A, Muzzafar K, Bhat SA. Giant 'giant cell tumor' of pelvis. J Sci Soc 2012;39:98-9.
Source of Support: Nil. **Conflict of Interest:** None declared.