

Nasopharyngeal Bleeding due to Leech Bites in a 9-month-old Infant

Amir Hossein Jafari Rouhi, Saman Vegari¹, Samad Shams Vahdati, Davod Porhosein² and Ghazaleh Davarnia

Departments of Emergency Medicine and ¹ENT, Imam Rega Hospital, Tabriz University of Medical Sciences and ²Department of Pediatrics, Tabriz Children Hospital, Tabriz University of Medical Sciences, Iran

ABSTRACT

Leeches are annelids, comprising the subclass *Hirudinea*. There are freshwater, terrestrial and marine leeches. Haemophagic leeches attach to their hosts and remain there until they become filled up with blood and then they fall off to digest. Leech bites can manifest various symptoms, which lead to anemia. Here is reported, a case of leech bites in a 9-month-old infant, with a long history of hematemesis, melena, epistaxis and anemia which demanded repeated transfusions. So, leech bites may be a differential diagnosis of anemia particularly in the endemic rural areas where villagers use non boiled water. [Indian J Pediatr 2010; 77 (5) : 573-574] E-mail: jafariroohi@yahoo.com

Key words: GI bleeding; Infant; Leech

Anemia in pediatric age group has various causes including: decrease in RBC production, increased RBC destruction and acute blood loss such as in trauma, thrombotic-hemorrhagic disease and bleeding of esophageal varicose.^{1,2} Although leech bites is not a common cause of acute blood loss, but it may lead to severe anemia. Leeches can enter pharynx by drinking water or by swimming in infested water. There are many cases reported about internal attachment of leeches in different areas of human body such in pharynx, larynx, vagina, bronchi, nose and rectum.^{2,4}

This article presents a case of a 9-month-old infant with previous long history of admission, for GI bleeding compensated by repeated transfusions, finally diagnosed as leech bites.

REPORT OF CASE

A 9-month-old boy, from a village in the suburb of Marand (North West of Iran), was admitted in a small hospital because of hematemesis and melena. On admission, in spite of packed cell infusion, he showed

decreased Haemoglobin (Hb) level. So he was referred to Tabriz Children Hospital for further management.

On arrival, the patient was restless, pale with acute epistaxis and hematemesis. His heart rate was 160 per min. There was no petechia and purpura. No lymphadenopathy and organomegaly were detected. Nasogastric tube was inserted and large amount of light red coloured blood was evacuated. Both nostrils and mouth were full of fresh blood. While suctioning the mouth and oropharynx the patient's gag reflex was stimulated and a violet soft tissue mass measuring 3×5cm appeared in oropharynx. Initially it was doubted to be hemangioma, but after recurrent examination a moving mass with several rings on its surface was seen. The patient was transferred to critical care unit in emergency room. He was intubated and after sedation and lidocain infusion into nostrils, the leech was pulled out by forceps (Fig. 1). Epistaxis and hematemesis were stopped within an hour and patient calmly slept.

DISCUSSION

Leech bites is a cause of bleeding and anemia in the pediatrics group.^{2,7} Agin *et al* in Ezmir pediatric center reported nasopharyngeal leech bite with symptoms of epistaxis and hematemesis.⁸ Ghimire *et al* explained

Correspondence and Reprint requests : Dr. Amir Hossein Jafari Rouhi, Assistant Professor of Pediatrics, Department of Emergency Medicine, Tabriz University of Medical Sciences, Tabriz, Iran

[DOI-10.1007/s12098-010-0066-5]

[Received October 13, 2009; Accepted January 1, 2010]



Fig. 1. Removed Leech with dark brown color and two lateral orange lines

epistaxis on a nostril due to leech bites.⁹ Siddiqui presented severe cases of anemia requiring percutaneous infusion with nasal infection due to leech bites.¹⁰ Bilgen *et al* reported nasopharyngeal infection and nostril obstruction for a period of four month.⁵ Kayagusuz reported four patients presenting with stridor and dyspnea, because of laryngeal attachment of leech.¹¹ Cundall and his group reported one death among 3 cases in severe state out of 6 cases due to anemia in North of Kenya.² Also vaginal bleeding has been reported in a 50-year-old Ethiopian woman during menopause because of leech bites.¹² Alcelik *et al* diagnosed a leech as a foreign body in the eye of a Turk child.¹³ In most of the above case reports, leech bites manifest with various degrees of anemia, but the symptoms are different from each other. And mostly the symptoms presented are bleeding (more than obstruction and infection).

Leeches can enter pharynx by drinking water or by swimming in infested water. Many cases have been reported about the internal attachment of leeches, in different areas of human body, such in pharynx, larynx, vagina, bronchi, nose and rectum.^{2, 4}

CONCLUSIONS

Provision of clean water in the rural areas and encouraging villagers to drink boiled water and also obligating them not to swim in endemic areas, can prevent leech bites. Therefore, unexplained bleeding in endemic rural areas should lead one to suspect leech bites and its consideration as a differential diagnosis.

Contributions: AHJR was attending physician, supervised the case report; SV, ENT consultant involved with case presentation, SSV; responsible for Emergency Management and case presentation, DP; pediatric consultant involved in case presentation. GD; Emergency Medicine Intern, was responsible for translation.

Conflict of Interest : None.

Role of Funding Source: None.

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