

Leeches: An Unusual Cause Of Epistaxis In The Children

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1. Abstract

Epistaxis is one of the most common ear, nose and throat (ENT) emergencies to present to general practitioners. The leech is an aquatic worm living in fresh water, especially in tropical areas. It may be found exceptionally in the upper aerodigestive tract (UADT) after consumption of spring water or water from natural wells, after swimming in still waters (lakes and dams), and caused epistaxis, hemoptysis, or laryngeal dyspnea, according to its localisation. We reported a case of 12 year old children presented to the emergency for 2 weeks epistaxis, due to swimming in still waters. The delay between infestation and onset of symptoms ranged from 15 days. Leeches were found in the oropharynx. The parasites were removed. The diagnosis should be made rapidly to prevent complications. Whatever the localization, removing the parasite is difficult. Evolution after treatment is rapidly favorable, with complete disappearance of symptoms.

2. Introduction

Leeches are rare blood-sucking endoparasites and live in unfiltered water or contaminated water, and they can cause potentially fatal complications [1]. People generally can receive leeches into their bodies when using unfiltered or contaminated water to bathe, to drink, or to swim. Therewithal, they can be transmitted through the conjunctiva, cornea, vagina, vulva, and urethra. Leeches can pass from the mouth and nose to the epiglottitis, nasopharynx, and even the trachea and bronchi [2]. They remain for days and weeks. The most prominent symptom is continuous

bleeding from the mouth and nose in patients that have leech infestations, and the other symptoms are headache, fatigue, and discomfort. Leeches that go into the pharynx and larynx cause respiratory distress and can lead to death through the trachea or bronchi. In rural areas, people who are living in rural areas where drinking water from springs is a habit can take leeches in this way. In this case report, we presented a 12 year-old children had a leech infestation in the nasopharynx that caused symptoms of epistaxis and obstruction of the upper respiratory system.

3. Observation

A 12-year-old children who lived in a rural area presented to the emergency department with complaints of intermittent epistaxis, and nasal obstruction, for about 2 weeks. In the medical history of the patient, he was previously evaluated for these complaints in another medical center. Then, upper respiratory tract infection was diagnosed and discharged on prescription. The patient was admitted to the emergency department with complaints of non-regression of the symptoms. We learned from his family that he was living in a village and using unfiltered water from the spring occasionally. On physical examination, A moving gray green foreign body was seen in the oropharynx. Other systemic examinations were normal. The patient was consulted by an otolaryngologist. The foreign body was removed with the help of forceps and understood to be a leech that measured nearly 6 cm in length (Figure 1). The patient was discharged from the emergency department after a few hours having no complications.

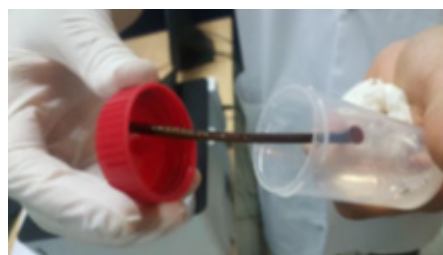


Figure 1: The leech was put in a box and measured nearly 7cm in length

4. Discussion

Leeches can generally pass into the human body when using unfiltered water to bathe or to drink in rural areas. Leeches can be in any location from the larynx to the upper respiratory tract when they are taken into the body by drinking contaminated water. Nasal leech infestation is a major frequent form of leech endoparasitism. In our patient, the leech location was similar to the literature, too. When leeches feed, they secrete hirudin for bleeding that can sustain for a long time, which supports the leeches to get complete food [1]. Symptoms of leech infestation may differ regarding localization of the leeches. If a leech is located at the nasal cavity or nasopharynx, it may cause epistaxis, nasal obstruction,

or the sense of an alien body moving around in the nose. When patients have a nasal leech infestation, their major symptom is recurring epistaxis. Other symptoms, such as hemoptysis, hoarseness, respiratory distress, and hematemesis, were also reported. If the diagnosis of leech infestation is delayed, severe anemia and death due to asphyxia may occur. Direct or indirect laryngoscopy is used to diagnose leech infestation, and the leech can be removed [1, 3]. When we use direct laryngoscopy to remove the leech, we may slog sometimes due to its strong adherence to the place and mucoid and fragile body, which ruptures easily [3]. When the leech is close for catching with the hand or forceps, hypertonic saline solution may be given to the nasal cavity, and then, it can be caught and gently pulled out. Nasopharyngeal leeches can be removed by direct injection of 5% cocaine or 4% lidocaine solution into the leech after it is paralyzed. In addition to this, different materials can help us to remove the leech prior to application, such as physiological saline, nit, oil of turpentine, and alcohol [3]. The operation was performed by an otolaryngologist with indirect laryngoscopic examination, and the leech was removed from the pharynx with forceps. There was no complication due to removal of the leech.

5. Conclusion

Especially, leech infestation should be considered in some cases. who are not fully able to express themselves, such as children and mentally retarded patients, live in a rural area, and use unfiltered water, and in unknown causes of the patient's complaints, like epistaxis, nasal congestion, sore throat, and dyspnea.

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