

Case Report



Oropharyngeal Leech Infestation: A Case Report

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ABSTRACT

We report a case of a oropharyngeal leech infestation due to poor water supplies and sanitation, which may be presented with sore throat, dysphagia and hemoptysis and discussed treatment options. In our case, the leech was removed under general anesthesia. Even though oropharyngeal leech infestation is very rare, it may occur after drinking contaminated water. Leeches should be in the differential diagnosis for patients with oropharyngeal masses in developing countries.

Key words: *Leech, Oropharynx, Hemoptysis, Dysphagia.*

ÖZET

Orofarengal Sülük İnfestasyonu: Olgu Sunumu

Bu olguda kırsal alandan şehre taşınan su ve bu suyun arıtımsız içilmesi sonrası boğaz ağrısı, disfaji ve hemoptizi gibi bulgulara yol açan, orofarengal bölgeye yapışan sülük infestasyonu ve tedavisi tartışıldı. Genel anestezi altında sülük forseps ile çıkartıldı. Orofarengal bölgede sülük infestasyonu oldukça nadir olmasına rağmen özellikle sülük ile kontamine su içimi sonrası görülebilir. Gelişmekte olan ülkelerde orofarengal kitlelerin ayrıncı tanısında ender olarak rastlansa da düşünülmelidir.

Anahtar Sözcükler: *Sülük, Orofarenks, Hemoptizi, Disfaji.*

Leeches are hemophagic hermaphroditic parasites that vary in color and in length from a few milimeters to half a meter in length (1). Leech infestation is very rare in cities (2). Swimming in rural streams and drinking infested water in rural areas predispose the patients. They may attach to mucosa of upper respiration and digestive systems. The possible infestation sites are nasal cavity, oropharynx, hypopharynx, larynx, trachea and esophagus (3).

We report here the case of a 12 year-old patient who presented with a history of oropharyngeal leech infestation.

CASE REPORT

A 12 year-old boy was referred to our emergency department with complaints of sore throat, dysphagia and fresh blood in his mouth for 2 days. Clinical examination revealed a body temperature of 36.7 C, a heart rate of 86/min, a respiratory rate of 18/min, oxygen saturation of 96%. The hemoglobin level was 11.8 gr/dl and the hematocrit was 34%, within normal limits as well as the biochemical and coagulation investigations. Auscultatory sounds were normal. Examination of the oropharynx revealed a darkened, peristaltic object

which was 3x4 cm in size. Fresh blood was observed to ooze around the object (Figure 1).



Figure 1. Engorged leech in oropharynx

The object was removed using a blunt forceps under general anesthesia with any complication, also any complication was observed afterwards. The removed object revealed that it was a leech, 7 cm in length (Figure 2). The patient was relieved completely after the removal. Metronidazol was prescribed for a possible secondary infection and the patient was discharged on the next day.

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Received/Geliş Tarihi: 17.03.2013

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Accepted/Kabul Tarihi: 10.07.2013

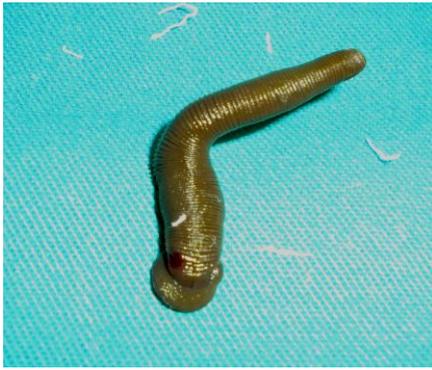


Figure 2. Closer view of the parasite

Further questioning about the source of leech infestation revealed a history of drinking from rural water supplies.

DISCUSSION

Leeches are carnivorous, hermaphrodite, segmented worms that belong to phylum Annelida, Class Hirudinea. Aquatic leeches can inhabit both fresh and saltwater bodies, most commonly relatively still waters, sluggish streams and paddy fields. Leeches can vary from 5 to 15 cm in length. A leech has two suckers, one at each end. The mouth lies within the anterior sucker. Blood-sucking species have jaws in the anterior sucker that contain chitinous teeth for biting. Hemophagic species engorge and darken during blood sucking (4-5). They may enter the body via the excretory openings of individuals who drink or bathe in infested waters, causing subsequent internal hirudiniasis (6). Possible sites of leech infestation are nasal cavity, oropharynx, hypopharynx, larynx, trachea, esophagus, vagina, urethra and rektum (3-7).

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When lodged in the oropharynx, the leech is able to simulate the symptoms of angio-edema. Signs of mechanical obstruction, including unilateral nasal obstruction, dysphagia, dysphonia, or dyspnea can progress in time, since the leech will increase its size during the period of feeding. In this case, the patient had dysphagia (3-8). This foreign body, in the respiratory tract is an emergency and requires immediate attention because the ensuing airway obstruction may cause hypoxia and death (6). Severe anemia and cardiovascular findings may be observed depending on the severity of mucosal damage (9).

The strong attachment of the leech to the mucosa necessitate minuteness and caution during removal, which can be managed under general or topical/local anesthesia. Injection of local anesthetic or topical toxic agents have been proposed to detach leech from mucosa (10). However, they should be applied cautiously in order to avoid any mucosal edema and bleeding. Bilgen et al have reported that they used topical anesthetic agents, such as lidocain to paralyze the leech (11). Contrarily, Kuehnemund et al have removed the leech using a forceps without any complication (2). Oghan et al (3) have used electrocautery to remove the leech. General anesthesia is typically indicated for the diagnosis and removal of leeches localized in the mucosa of larynx, hypopharynx, upper pharynx and upper digestive system (11). In our case, the leech was removed from the posterior oropharynx under general anesthesia using blunt forceps, without electrocautery.

Leech infestation should be considered in the differential diagnosis of pediatric patients presented with soar throat, dysphagia and hemoptysis in developing countries. Boiling water from rural supplies should be encouraged to prevent infestations.