

A Leech in the Nasopharynx of a Child: A Case Report

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Infestation with leeches can happen due to drinking from spring water or other unhealthy water from non-hygienic sources or swimming in infested water like Wells and swamps, and can lead to several complications in the aerodigestive tract. Epistaxis, melena, and foreign body sensation had been reported in the literature as manifestations of this condition. We described a 12-year-old child presented to our department with dry cough and spitting of blood after swimming in the water pond of a Well that led to leech entry into the nasopharynx. Removal was done, and the patient became symptom free. Infestation with a leech can lead to variable symptoms in the aerodigestive tract like spitting of blood and irritation at the site of its attachment. Hence, leech should be put in mind in dealing with patients visiting physicians with the above symptoms, especially, if they come from rural areas that drink spring or Well water.

Keywords: Cough, Epistaxis, Leeches, Nasopharynx

INTRODUCTION

Leeches belong to the *phylum Annelida* of the class *Hirudinea*. They are bloodsucking parasites that attach to vertebrate hosts, bite through the wounded skin or aerodigestive mucosa and suck blood.¹

Leeches can enter the pharynx or the larynx by drinking unhealthy water, which is mainly found in lakes, swamps, wells, and springs. Swimming in infested water is another approach for infestation with these leeches.^{2,3}

Attachment of leeches can happen in the nose, pharynx, larynx, bronchi, vagina, or rectum as reported in the literature.²⁻⁴

The patient with leech infestation can present with hematemesis, hemoptysis, and epistaxis.⁵

In the present report, we present a case of a 12-year-old boy with frequent spitting of blood and coughing that turned out to be caused by leech infestation of the nasopharynx.

CASE REPORT

A 12-year-old boy presented to our outpatient clinic of the Department of Otorhinolaryngology, Sultan Qaboos Hospital in Salalah, Oman with frequent dry irritative cough and spitting of blood of 7 day's duration. The patient also complained from pain and foreign body sensation in the throat.

He denied any ear, nose or throat diseases or systemic illness.

Full history was taken, and the patient mentioned that his symptoms started 7 days ago after several hours from swimming in the water pond of a well, and it was increasing in intensity. He reported that he was completely normal before that incident.

Full general and special examination of ear, nose revealed no abnormality, but examination of the throat showed congestion of the oropharyngeal mucosa, especially tonsils, and epiglottis. A dark shadow was seen covering the posterior pharyngeal wall with complete opening of the mouth. Slow movements of this shadow had been noticed, and it was then obvious to be a large leech (Figure 1). Areas of minute injury with some bleeding points were seen trickling from the nasopharynx around that leech.

Endoscopic nasal examination showed severe congestion and bleeding points around the head of the leech in the nasopharynx.

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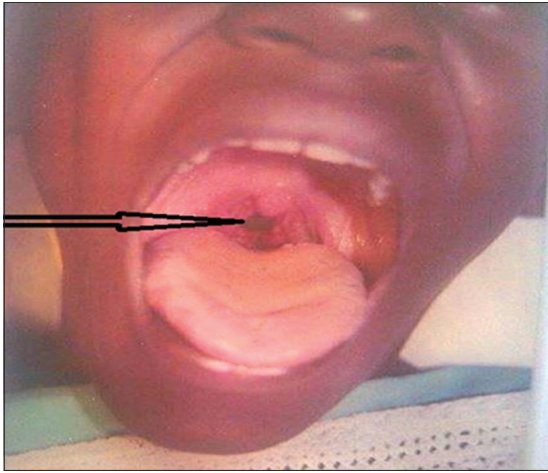


Figure 1: The body (middle part) of the leech appears behind the uvula with the two ends in the nasopharynx

Patient's consent was taken for the removal of the leech under local anesthesia after full explanation of the case.

Under local anesthesia with xylocaine 10% spray applied to the oropharynx, used tongue depressor and instructed the patient to fully open his mouth, then the leech was held from its body with McGill forceps and pulled out. Minimal bleeding points were seen, and they stopped spontaneously without further intervention. No other foreign body found. We believe that the removal of the leech is curative, therefore, no medication was given to the patient.

The leech was six centimeters in length as measured after removal (Figure 2). Patient discharged on the same day with no treatment given and seen symptom free after 1-week in the follow-up visit.

DISCUSSION

Leeches are of two types according to their habitat; those which live in water and others that live on land.⁶ In the literature, it was reported that leech infestation can affect the nasopharynx,⁷ the larynx,⁸ the eye,⁹ the ear,¹⁰ and the gastrointestinal tract.⁵ The prominent and the common complaint of patients in all of these cases was bleeding from the site where leeches attach to.

Agin *et al.*, reported that epistaxis and hematemesis were the symptoms of nasopharyngeal infestation with a leech.¹¹ Ghimire *et al.*, reported a unilateral nostril epistaxis caused by leech infestation.¹²

In our presented case of naso-oropharyngeal infestation with a leech, cough and spitting of blood were the symptoms mentioned by the patient.

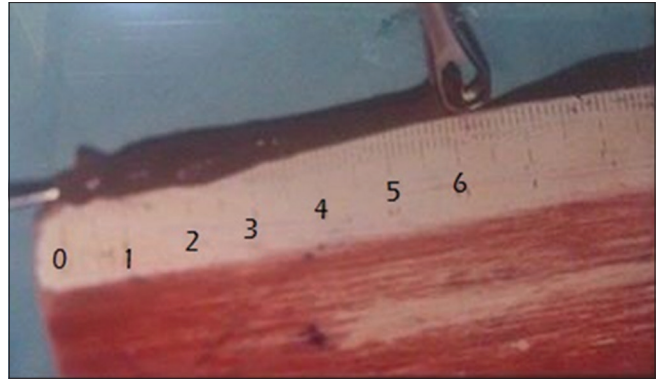


Figure 2: The leech after removal

In order to stop the bleeding in these cases, the leech should be removed completely. Lidocaine 4% was reported to cause immobility of the leech in the eye, which facilitated its removal.¹³

In our case presentation, xylocaine 10% spray was used as a local anesthetic and to suppress gag reflex, followed by manual removal of the leech.

Due to the anticoagulant hirudin that leeches secrete, bites may bleed more than a normal wound after the leech removal. The effect of the anticoagulant will wear off several hours after the leech removal and the wound become clean. While the leech is stuck to the mucosa, it can suck out the blood. Large adults can consume up to ten times their body weight in a single meal, with 5-15 ml being the average volume taken.¹⁴

In the presented case, there was minimal bleeding after removal of the leech. It stopped spontaneously, and the patient discharged with no treatment as leech removal was believed to be enough in this condition.

CONCLUSION

Drinking or swimming in unhealthy water in endemic areas carries the possibility of leech infestation. It should be put in mind that leech infestation is one of the causes of bleeding from the oral cavity or dry, irritating cough, especially after a documented history of drinking or swimming in suspicious unhealthy water sources.

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