

Leech in the Nose – an unusual cause of epistaxis

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Abstract

Leech is an uncommon nasal foreign body, which can cause epistaxis. It is an aquatic segmental worm living in fresh water most commonly in tropical areas. Once it is attached in the nose, it will secrete an anticoagulant enzyme named hirudin, and that will result in continuous bleeding more than from a normal wound even after it is removed. We present a case of a live leech in the nose that caused unilateral epistaxis in a patient with a recent history of jungle trekking.

Introduction

Epistaxis is a common symptom. It is usually divided into bilateral and unilateral epistaxis. Unilateral epistaxis is commonly caused by tumour or foreign bodies, either animate or inanimate. Maggots are the most common animate nasal foreign body encountered, especially amongst debilitated patients. However, leeches as a cause of unilateral epistaxis are uncommon. Leech as a nasal foreign body has been reported in a limited number of articles.¹ History taking plays an important role in alerting the physician to the diagnosis, for instance, history of jungle trekking and swimming in ponds.

Case report

A 57-year-old male presented with epistaxis from the left nose for 1 week. The bleeding was minimal and stopped spontaneously. There were no nasal obstruction and sensation of foreign body moving inside the nose. Patient recently went for jungle trekking with his friends. There were no other relevant symptoms.



Figure 1. Nasoendoscopic examination showed moving leech at the left inferior turbinate

Nasoendoscopic examination was done and showed the presence of a leech in the left nasal cavity at the inferior turbinate (**Figure 1**). The leech was moving and removal was conducted using suction. There was no difficulty during removal, except for minimal bleeding which stopped with digital pressure applied over the nose. No other abnormalities were found in the nasal cavity.

Discussion

Leeches are annelids or segmented worms. Common species of leeches that can infest humans includes *Hirudinea granulosa* and *Hirudinea viridis*.² During the process of sucking blood, the leech secretes an anticoagulant that is responsible for continuous bleeding from the bite site.³ Leech forms an important differential diagnosis for nasal bleeding because it can travel down to lower airway and causes serious complications.

In our case, the leech was not noticeable to the private general practitioner because it could not be seen by anterior rhinoscopy. A live leech can move around in the nasal cavity and settle in the hidden areas that are difficult to visualise even with endoscopy, and hence can be missed on examination. So examination may not always reveal its presence in the nasal cavity.

A nasal leech has been reported to cause severe anaemia requiring blood transfusion in a child.⁴ A case of leech in the hypopharynx that caused unexplained bleeding from the throat has also been reported. In this case, the leech was visualised on the aryepiglottic fold only on repeated indirect laryngoscopy.⁵ Leech infestation can sometimes be difficult to diagnose especially when it is not visible on examination.

Leech in the nose can be removed in the clinic. Leech respiration takes place through its body wall. Anaesthetic agents such as lidocaine spray can be used to paralyse it and cause suffocation.⁶ As a consequence, it will move to the surface and its attachment to the mucosa become weakened. Then the leech can be removed easily.⁶

Conclusion

Leech infestation should be considered as one of the differential diagnoses in cases of unresolving epistaxis, especially when the history is suggestive of possible leech infestation such as recent jungle trekking. Endoscopic examination should be done to exclude the possibility of a leech in the nose.

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