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Nasal Leech Infestation Causing Persistent Epistaxis in a 3-Year-Old Girl: A Case Report

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ABSTRACT

Persistent epistaxis can be caused by foreign bodies in the nasal cavity, including both inanimate objects and living organisms. Although rare, nasal leech infestation can cause unilateral epistaxis. We report the case of a 3-year-old girl with a 3-week history of severe left-sided epistaxis. The persistent severe epistaxis resulted in severe anemia. An examination of the nasal cavity revealed fleshy material in the left nasopharynx, which was subsequently identified as a leech. Following irrigation of the left nasopharynx with normal saline and a period of observation, the leech was removed using artery forceps under rhinoscopic guidance. The anemia was treated with packed red blood cell transfusion, and the patient was discharged after 3 days. Nasal leech infestation should be considered in the differential diagnosis of persistent epistaxis, particularly in patients living in developing countries or those with a history of bathing in or drinking contaminated water from stagnant ponds or puddles.

KEYWORDS

Epistaxis, Nasal leech, Nasal foreign body, Anemia, Yemen.

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Introduction

Leeches are hermaphroditic, blood-sucking parasites that vary in color and range from a few millimeters to half a meter in length [1]. Depending on the contraction of their bodies, they appear either leaf-like or cylindrical in shape.

Case Report

A 3-year-old girl presented with a 3-week history of severe left-sided epistaxis. The persistent, heavy epistaxis led to severe anemia. Fleshy material was observed in the left nostril during examination of the nasal cavity and was ultimately identified as a leech. Following irrigation of the left nasopharynx with normal saline and a period of observation, the leech was removed using Magill forceps during rhinoscopy (Figure 1, Video 1). The anemia was treated with packed red blood cell transfusion, and she was discharged after 3 days. Leech infestation should be suspected as a cause of epistaxis, especially in developing countries and in patients who have a history of bathing in or drinking contaminated water from stagnant ponds or puddles.

Figures. N asal leech infestation causing persistent epistaxis in a 3-year-old girl. A case report.



Figure 1: Live leech in a glass container.

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Video 1: The extracted leech moving in a glass container filled with water.

Discussion

Leeches that attack humans are divided into land leeches, which have powerful jaws that can penetrate the skin and attach to anywhere on the external surface of the body, and aquatic leeches, which have weak jaws that require soft tissues to feed on, allowing them to enter orifices such as the pharynx and vagina [2]. Land leeches attach themselves to the skin, feed, and eventually fall off. Aquatic leeches live exclusively in freshwater, where they deposit their eggs on water plants, and their young may be seen in the water [2]. Young leeches enter orifices such as the nose and pharynx, where they attach themselves for prolonged periods until they become adults, after which they detach and fall into the water. These are more dangerous than land leeches because they are more likely to cause severe anemia [2].

Aquatic leech infestations are less common than land leech infestations but may be considerably more harmful. During drinking or washing, aquatic leeches can enter the mouth or nostrils, whereas bathing in infested water may expose the conjunctiva, vulva, vagina, and urethra [3]. After entering the mouth or nostrils, they can quickly migrate to the nasopharynx, as in the present case, or to the epiglottis or the esophagus. In some cases, they can even reach the trachea and bronchi. They secrete an anticoagulant when attached to the mucous membranes and become engorged, resulting in bleeding, depending on the site of attachment (epistaxis, hemoptysis, or hematemesis), and potentially leading to severe anemia [4]. Prolonged headaches can result from a leech in the nares, whereas a cough with bloody discharge, hoarseness, dyspnea, pain, and even suffocation may occur if the leech is present in the larynx [5,6]. Alternatively, difficulty in swallowing may occur if leeches are present in the pharynx or esophagus [7].

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