



## Globus Sensation Due to a Mobile Foreign Body in a 41-year-old Female

Saman Vegari<sup>1\*</sup>, Mehdi Ghaffarlou<sup>2</sup>, Leila Davarimajd<sup>3</sup>, Samad EJ Golzari<sup>4,5</sup>

<sup>1</sup>Department of ENT, Tabriz University of Medical Sciences, Tabriz, Iran

<sup>2</sup>Department of Anesthesiology, Imam Reza Hospital, Tabriz University of Medical Sciences, Tabriz, Iran

<sup>3</sup>Tabriz University of Medical Sciences, Tabriz, Iran

<sup>4</sup>Medical Philosophy and History Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

<sup>5</sup>Students' Research Committee, Tabriz University of Medical Sciences, Tabriz, Iran

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### ABSTRACT

Leech infestation could be associated with wide range of complications including epistaxis, stridor, hemoptysis, globus sensation, hematemesis, and vaginal bleeding. In the present case report, we introduce a case of leech infestation in a 41-year-old female presenting with chronic globus sensation, stridor, vomiting and dysphagia later diagnosed with leech infestation. Therefore, leech bites might be considered as a differential. Diagnosis of globus sensation in the endemic rural areas where in unhealthy water from natural sources is consumed without taking required hygienic precautions.

### Introduction

A foreign body in the respiratory tract is considered an emergency condition necessitating immediate measures; as any delay in resolving the problem would lead to undesirable consequences including hypoxia and death.<sup>1</sup> In spite of being a rare finding, leech bites cause globus sensation and respiratory tract obstruction in more severe cases. Consequently, facing globus sensation complaint in endemic rural areas one should consider leech bites as a differential diagnosis.

Leeches enter pharynx or larynx by either drinking unhealthy water from the natural sources i.e. swamps, lakes, rivers, springs and wells or swimming in infested waters. Internal attachment of leeches in different areas of human body such as pharynx, larynx, vagina, bronchi, nose and rectum have been reported in several cases.<sup>2-4</sup>

In the present report, a 41-year-old female with globus sensation and respiratory distress is presented who was finally diagnosed with laryngeal leech.

### Case Report

A 41-year-old female, from a rural area of Marand, northwest Iran, presented to a rural general clinic com-

plaining of globus sensation, respiratory distress, stridor and dysphagia. She was referred to our clinic in Imam Reza hospital, a referral hospital in Tabriz, capital of East Azerbaijan province, Iran. At admission, the major symptoms of the patient were respiratory distress and marked tachypnea (respiratory rate: 45), stridor, feeling something in the throat, vomiting and nausea.

On examination, throat was normal without any sign of bleeding. In indirect laryngoscopy examination, a dark brown mass could be seen on the laryngeal surface of the epiglottis. In this instance, a tumor mass diagnosis was proposed; however, with further examination it could be observed that the mass had rings and was mobile. Knowing the fact that inhabitants of the mentioned area do consume spring water, we suspected leech infestation as a probable diagnosis.

The patient was transferred to the operating room. Later, she was intubated and underwent general anesthesia. Subsequently, surgical laryngoscope was positioned and fixed with suspensory apparatus. Local anesthesia was achieved using lidocaine infiltration into the foreign body, the leech was extracted using a forceps (Figure 1).

\*Corresponding author: Saman Vegari, E-mail: [svegari@yahoo.com](mailto:svegari@yahoo.com)



**Figure 1.** Removed Leech with dark brown color and two lateral orange lines

### Discussion

Leeches can enter pharynx and larynx through drinking unhealthy water from natural sources or by swimming in infested waters. Internal attachment of leeches in different areas of human body such as pharynx, larynx, vagina, bronchi, nose and rectum has been reported in several cases.<sup>2-4</sup> including a 9-month-old patient with anemia and epistaxis who suffered from nasopharyngeal leech bites.<sup>2</sup> Agin *et al.* reported nasopharyngeal leech infestation with epistaxis and hematemesis.<sup>5</sup> Ghimire *et al.* reported a unilateral nostril epistaxis caused by leech infestation.<sup>6</sup>

Siddiqui and colleagues reported severe anemia requiring packed cell transfusion and nasal infection caused by leech.<sup>7</sup> Bilgen reported leech-caused recurrent epistaxis during 4 months.<sup>8</sup> Kayagusuz *et al.* reported four patients with laryngeal leech infestation presenting as stridor and dyspnea.<sup>9</sup> Cundall *et al.* reported a death case following leech-produced anemia in North of Kenya.<sup>3</sup> Vaginal bleeding has also been reported in a 50-year-old Ethiopian woman after menopause due to leech infestation.<sup>10</sup> Alcelik *et al.* diagnosed a leech as a foreign body in the eye of a Turkish child.<sup>11</sup> In most of the above-mentioned case reports, leech bites manifested with various degrees of anemia; however, the accompanying symptoms are varied and the most frequently presented symptom is bleeding (more than obstruction or infection).

### Conclusion

Bringing the piping facility to the rural areas, boiling water prior to drinking in the infected regions and avoid-

ance of swimming in unhealthy waters in the endemic regions can prevent leech infestation. In developing countries, leech infestation should be considered in cases where epistaxis, hematemesis, gastrointestinal bleeding and severe anemia of unknown origin persist time.

*Ethical issues:* The local ethics committee of Tabriz University of Medical Sciences approved the study.

*Conflict of interests:* The authors declare no conflicts of interest.

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