Case Report

A Rare Cause of Otalgia and Otorrhagia: Alive Leech in the Ear

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ABSTRACT
Leech infestation in otolaryngology is sporadically seen in remote area of tropical countries, but the cases are usually not scientifically reported. We are reporting an unusual case of a land leech removal from external auditory canal (EAC).

Keywords: Leech, Foreign body ear, Otalgia, Ear pain

INTRODUCTION
Leeches usually gain access into the human body via ingestion of unclean water from non-hygienic sources or swimming in contaminated water like wells, lakes, swamps and springs (1). Previous leech involvement cases were reported in nose, nasopharynx, larynx, pharynx, eye, rectum and vagina. Prominent sign of all cases was active bleeding from the leech attachment site; that stopped with leech removal (2). The most common mode of presentation in the leech infestation is via the nasal cavity (3).

Leeches that attack human may be divided into two classes (aquatic and land). Land leeches have powerful jaws that can penetrate the skin so that they can attach anywhere on the external surface of the body. Land leeches are common in Southeast Asia, the Pacific Islands and South America. Aquatic leeches have weak jaws and are only able to attach on soft tissues, such as the mucosa of the upper aerodigestive tract, rectums or vagina. Aquatic leeches live exclusively in fresh water and they have a worldwide distribution (2,3).

CASE REPORT
A 71-year-old man presented with sudden onset right otalgia and otorrhagia for a 12-hour duration. He had no history of the head trauma or previous ear disease. Further history was taken and the patient mentioned that the symptoms started several minutes after feeding the dairy herd in the farm during heavy rain. He had no history of swimming in river.

During initial presentation, the patient mentioned of having motile foreign body sensation and active bleeding from the right ear. Suspicious of alive foreign body, the patient then applied a few drop of tobacco leaf juice into the right ear as a traditional repellent. He took dried-tobacco leaf from the cigarette and mixed it with few drops of water to produce the juice. Upon the application of the tobacco leaf juice, the pain and the sensation of foreign body movement in the right ear canal decreased. However, a small amount of bleeding still occurred. He denied of any attempt to remove the foreign body.

Upon review, the patient appeared comfortable and was not in a severe pain. The endoscopic examination of the right ear revealed minimal oozing of blood with clot obscuring the ear canal. After suction of clots, a leech was observed to be deeply seated near the tympanic membrane. There was a jagged wound with minute point of oozing blood at the anterior wall of the external auditory canal (Figure 1). Eventually a 3 cm non-motile leech was smoothly removed from the right ear using a Baron suction tips under endoscopic visualization. The bleeding stopped a few minutes after a compression with cotton ball soaked in adrenaline. The tympanic membrane was intact. No other foreign body or abnormality was seen. Follow up review at the clinic 5 days later showed that the patient had no otalgia or otorrhagia. The otoscopic examination on the patient revealed there were minimal clots in the right ear canal and at the tympanic membrane.

DISCUSSION
Review of literatures showed only one case of a leech in the ear had been reported. It was a case of an aquatic leech removal from EAC in a man with history of swimming in the river. The author concluded that “Leech infestation is a rare cause of otorrhagia and should be suspected in the endemic region in all of unusual bleeding; it can be diagnosed and treated by exact inspection and removal” (4).

Leeches are blood-sucking hermaphroditic worm, belonging to the phylum Annelida of the subclass Hirudinea (2,6). Leeches comes in different shapes from elongated and cylindrical to broad or ovoid. Their colour may be black, brightly coloured, or mottled. Their length varies from 5 mm to 45 cm. Posteriorly, the leech has three jaws arranged in a triradiate configuration that attach to and bite through human skin. Anteriorly, it has a...
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Leeches are not harmful to humans at all times, leeches such as the Hirudo medicinalis is often used to treat venous congestion in the settings of microvascular replantations, reconstructive surgery such as free-flap reconstruction, and traumatology such as massive post-traumatic soft tissue hemATOMa (4).

The important consideration in handling this cases are good history-taking and physical examination to determine the infestation. Drinking or swimming in unclean water in endemic areas carries the possibility of aquatic leech infestation, but land leech infestation is hardly to be suspicious as it can occur even in case of exposure to the grass area in a rainy day. Sudden onset of otorrhagia or otalgia with no history of ear disease and sense of moving object in the ear canal can lead us to a living foreign body in the external ear.

REFERENCES