



**OCULAR LEECH MANIFESTATION: A CASE REPORT**

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**ABSTRACT**

We describe a case of female child with manifestations of ocular leech infestation. A 8-year-old girl was brought to our outpatient clinic with complaint of eye rubbing and redness in eye. Slit-lamp examination showed conjunctival injection with a moving dark black–brown foreign body partly attached in the lower conjunctiva. After applying topical anesthetics, the leech, measuring 1 cm in length, was extracted under a microscope. The patient began using topical antibiotic and corticosteroid agents. By 1 week after extraction, the patient had no obvious symptoms or signs and no corneal/scleral involvement was observed.

**KEYWORDS:** leech, ocular foreign body, conjunctival reaction.

**CASE REPORT**

A 8-year-old girl was brought to our outpatient clinic with redness and excessive rubbing of eyes. Patient had history of visit to a lake a day before. There was no history of trauma to the eye or any other chronic eye disorders.

Upon examination, the girl had good fix and follow in either eye. Slit-lamp examination showed conjunctival injection with a moving dark black–brown foreign body partly attached in the lower conjunctiva near the limbus, resembling uveal prolapse. The dark black–brown foreign body was partially movable, with tail hanging. It was then identified as a live leech grasping the bulbar conjunctiva. After applying topical anesthetics, the leech was extracted under microscope with forceps, and it measured 1 cm in length. The patient was prescribed topical antibiotic and corticosteroid agents in tapering doses. At 1 week of followup, patients had no symptoms and all the signs had resolved. There was no evidence of scleral perforation, corneal injury, uveal prolapse, or uveitis.

**DISCUSSION**

Therapeutic use of leeches has been documented over the past 2,500 years. Before the medical and pharmacological advances that followed World War II, bloodletting by leeches was even reported to be an effective way of treating acute congestive glaucoma.<sup>[1]</sup> In modern plastic surgery, they have been used as decongestants for draining periorbital and scrotal hematomas.<sup>[2]</sup> In previous literature, five ocular leeches were removed directly with forceps after instillation of local anesthetic.<sup>[3]</sup> Other preparing methods before leech removal included irrigation with normal saline in

combination with injection of suxamethonium into the worm,<sup>[4]</sup> application of 3% hypertonic saline drops, or even direct application of cooking salt to the leech.<sup>[5]</sup> None of the articles reported long-term complications. The method of extraction we used involved instilling topical anesthetic drops and removing the leech with forceps using precaution to ensure that the leech's suckers and midbody were detached from the eyeball completely. We advocate that leech removal with forceps after instillation of local anesthetic is a safe method and should be attempted first. In refractory cases when the leech is firmly attached, additional preparing methods could be used, taking possible undesired eye irritation into consideration. Although most human leech infestations have been in the nasopharynx, ocular leech infestation should be considered in the differential diagnosis of patients presenting with ocular complaints, especially in those with a history of swimming or any type of exposure to water in streams and lakes. With proper management, it is feasible to preserve optimal ocular function, minimize morbidity, and reduce discomfort in the patient.

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