in this case, oral prednisolone was required. In other case series, high dose oral prednisolone (1 mg/kg) was effective and tapered off over 12 weeks in a paradoxical reaction with TB lymphadenitis presented with tense swelling and pus in tissue [1]. As seen in our case, steroid therapy should be considered for extensive tissue damage due to paradoxical reaction.

Although eyelid TB is very rare, TB infection should be considered in cases of atypical cellulitis or severe granulation on eyelid. In addition, if patients respond inadequately or symptoms worsen while on anti-TB therapy, it is very important to consider a paradoxical response and start steroid treatment at an early stage to prevent permanent tissue damage. Of course, other potential causes such as inappropriate anti-TB regimen, incorrect diagnosis, drug resistance, and atypical mycobacterium need to be distinguished.

Yuri Seo, Moonjung Choi
*Institute of Vision Research, Department of Ophthalmology, Yonsei University College of Medicine, Seoul, Korea*

Cheol Keun Park
*Department of Pathology, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea*

Jin Sook Yoon
*Institute of Vision Research, Department of Ophthalmology, Yonsei University College of Medicine, Seoul, Korea*
*E-mail: yoonjs@yuhs.ac*

## Conflicts of Interest

No potential conflict of interest relevant to this article was reported.

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# Orbital Dirofilariasis

Dear Editor,

Dirofilariasis is a zoonotic infection transmitted from animals to humans via a mosquito vector [1]. Human infection, particularly ocular infection, is rare; there have only been few reports, most of which involved patients who either lived in or had history of travel to dirofilariasis-endemic areas [2,3]. In this report, we present a case of dirofilarial ocular infection from South Korea. To our knowledge, this is the first ocular case reported in East Asia. The following case emphasizes the importance of considering dirofilariasis in the differential diagnosis of eyelid masses, even in non-endemic areas.

A 75-year-old woman was referred to our hospital with a two-week history of persistent right upper eyelid swelling despite the use of topical steroids. She denied any recent trauma, travel, insect bites, animal contact, or consumption of raw or undercooked food. She had no underlying ocular or systemic disease.

Visual acuities were 20 / 25 in both eyes, and right upper lid swelling and ptosis were present. An approximately 20 × 10-mm-sized round, semi-mobile mass was palpable on the right upper lid. No significant abnormalities were

found in other ocular examinations including exophthalmometry. Under the assumption of inflammation, orbital computed tomography was performed and revealed a lobulated mass with an ill-defined enhancing rim in the right upper eyelid with partial extension into the orbital cavity. After 12 days of treatment with moxifloxacin (400 mg) and oral prednisolone (30 mg), eyelid swelling had improved, and the size of the mass had decreased. Orbital computed tomography was repeated, and both the mass and the enhancement of areas around the mass were decreased, but still present. We decided to perform excisional biopsy for mass removal and histological diagnosis.

Right upper lid anterior orbitotomy and mass excision were performed. The mass was located within the fat layer and attached to the superior orbital rim. Histopathological examination revealed a degenerating parasitic worm with eosinophilic infiltration surrounded by chronic granulomatous inflammation, which was consistent with a degenerated parasite causing chronic inflammation. Microscopy revealed the worm to be 0.203 mm in diameter with characteristic bilateral projected internal cuticular ridges or lateral lines [4,5]. Based upon the morphological features, the worm was identified as a degenerating larva of *Dirofilaria immitis* (Fig. 1).

One week after the operation, no masses were palpable. After three more weeks, right upper lid swelling was decreased, and no palpable masses were present.

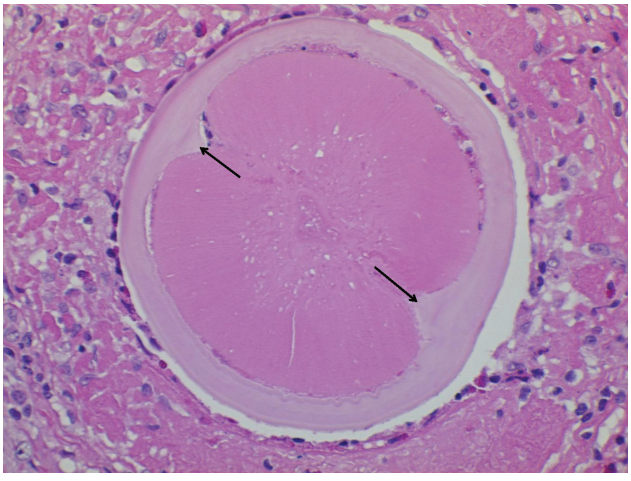

**Fig. 1.** Section of a degenerating nematode larva, most probably *Dirofilaria immitis,* found in the resected orbital mass. Bilateral projected internal cuticular ridges or lateral lines (arrows), one of the characteristic features of this nematode, are prominent (H&E, ×400).

Ophthalmic involvement of dirofilariasis is uncommon and difficult to diagnose. Surgical removal is necessary for both histopathologic diagnosis and cure. Although this is the first case report of orbital dirofilariasis in South Korea, ophthalmologists should include this parasitic infection in the differential diagnosis of inflammatory orbital masses.

Se Hyun Choi
*Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Korea*
*Department of Ophthalmology, Seoul National University Hospital, Seoul, Korea*

Namju Kim
*Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Korea*
*E-mail: 65567@snubh.org*

Jin Ho Paik
*Department of Pathology, Seoul National University Bundang Hospital, Seongnam, Korea*

Jaeeun Cho, Jong-Yil Chai
*Department of Parasitology and Tropical Medicine, Seoul National University College of Medicine, Seoul, Korea*

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