tates culture and drug-sensitivity testing. However, this method of estimation by real-time PCR is especially helpful when the anti-herpetic agent is ineffective and when clinical signs and risk factors of herpetic infection are present, along with the detection of herpetic DNA, and would allow ophthalmologists to make a more rapid and accurate diagnosis of ACV-resistant herpetic keratitis.

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Live Juvenile Strobilate Tapeworm in the Anterior Chamber of the Human Eye

The infestation of humans by Taenia solium (the pork tapeworm) is common in developing countries. The adult Taenia solium tapeworm remains confined to the small intestines; however, in the larval stage known as cysticercosis cellulose, this tapeworm has been identified in many other organs, including the eye. The juvenile strobilate tapeworm typically remains confined to the intestines; however, Bamrungphol et al report an extraintestinal manifestation in the spinal cord. We report 2 cases of live juvenile strobilate tapeworm, Taenia solium, seen in the anterior chamber of the eye.

Report of Cases. Case 1. A 48-year-old man living in the Himalayan foothills of North India presented with redness, pain, and progressive loss of vision in the left eye for over 4 months. His best-corrected visual acuity was 6/6 in the right eye and light perception in the left eye.

Figure 1. External photograph of the left eye of a 48-year-old man (case 1) that shows a large coiled tapeworm with marked hypopyon in the anterior chamber.

Figure 2. Photomicrograph of the tapeworm showing the scolex (head) with 4 large suckers and a rostellum (the region situated between the 2 sets of suckers) that is surrounded with hooks. Multiple pieces of the tapeworm show a flat tapelike structure with chains of segments called strobila.
His intraocular pressure was 14 mm Hg in the right eye and very low (ie, unrecordable) in the left eye. A slitlamp examination of his left eye showed severe anterior segment inflammation with abscess formation and a large tapelike worm that was freely mobile (Figure 1). The results of a systemic workup, including a blood cell count, a stool examination, a computed tomographic scan of the brain and orbit, and chest radiography, were normal.

The worm was surgically removed through a limbal incision. The scolex (head) was found to be firmly attached to the iris with suckers and required sector iridectomy. A cytological examination of the anterior chamber exudate revealed neutrophils. An iridectomy specimen showed part of the wall of the abscess attached to the surface of the iris without any part of the tapeworm. Light microscopy revealed the scolex and rostellum with a ring of hooks (Figure 2). The tapeworm was identified as possible juvenile *Taenia solium*.

The eye developed phthisis bulbi despite intensive treatment. No general infestation of *Taenia solium* or cysticercosis was observed during 5 years of follow-up.

**Case 2.** A 38-year-old man living in Nepal presented with progressive loss of vision and redness in the left eye for 2 months. His best-corrected visual acuity was 6/6 in the right eye and light perception in the left eye. His intraocular pressure was 14 mm Hg in the right eye and 6 mm Hg in the left eye. The left eye had a relative afferent pupillary defect with ciliary flush and moderate anterior segment inflammation. A posterior segment examination revealed a large subretinal cyst with the scolex inferiorly suggestive of ocular cysticercosis with total retinal detachment (Figure 3). The results of a detailed systemic workup, including a complete blood cell count, a stool examination, and magnetic resonance imaging of the brain, were normal.

The patient underwent a pars plana lensectomy and a vitrectomy of the left eye with subretinal cyst removal and silicone oil tamponade. The patient continued to have persistent fibrinous inflammation postoperatively despite a high dose of oral corticosteroids. On postoperative day 10, the patient underwent fibrin extraction and silicone oil removal with an intravitreal injection of dexamethasone acetate. Two days later, a live worm was noticed in the anterior chamber making whiplash movements (Figure 4). The worm was surgically removed in one piece with the help of a silicone tip backflush needle through a limbal incision. The scolex was firmly attached to the iris with suckers. Light microscopy revealed a scolex with 4 large suckers and a rostellum with 2 rows of hooks. This tapeworm was identified as juvenile *Taenia solium*. The patient received systemic and topi-
cal steroids. At 3 weeks of follow-up, his best-corrected visual acuity in the left eye was counting fingers at 3 m, with a quiet anterior chamber and a large scar seen temporal to the fovea.

Comment. Cysticercosis is the most common ocular parasitic infection in humans, caused by the larvae of the tapeworm *Taenia solium.* Humans and pigs act as the intermediate host by ingesting eggs or gravid proglottids (body segments). Once the eggs are ingested, oncospheres (larvae inside the egg that each have a ring of 6 hooks) are liberated. The oncospheres penetrate the intestinal wall, enter into portal vessels or the mesentric lymphatic system, and finally reach the systemic circulation. They are filtered out into the muscular tissues where they ultimately settle down and develop into the cysticerci (the resting stage of larva). Besides striated muscle, cysticerci may be seen in the eye and brain. The life cycle of the parasite is completed when humans ingest undercooked pork containing the cysticerci. In the human intestines, the cysts evacuate, and the scolex (head) anchors to the gut wall by means of its suckers and develops into an adult worm by gradual strobilation (the process of producing or growing new proglottids by asexual reproduction). The adult tapeworm resides in the small intestines, the cysts evaginate, and the evaginated scolex then attaches with hooks to the iris (the intestinal wall) and grows thereafter.

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Report of a Case. A 38-year-old man presented to our eye clinic 21 months after radiotherapy for optic nerve meningioma in the left eye. At initial assessment, he had a visual acuity (VA) of 6/36, a central retinal thickness of 531 µm, and minimal disruption of the foveal avascular zone. The decision was made to treat his condition with intravitreal injections of bevacizumab (Avastin; Roche). His left eye’s initial response to bevacizumab was very encouraging, with VA improving to 6/12 after 3 injections. However, this response was transient; after 6 injections, he had a VA of 6/18 and a central retinal thickness of 475 µm in the left eye. His treatment was then switched to intravitreal injections of ranibizumab (Lucentis; Novartis), and he experienced a complete resolution of his cystoid macula edema, with a final VA of 6/6 and a central retinal thickness of 264 µm in the left eye. This is an interesting case of tachyphylaxis to bevacizumab in a patient with radiation maculopathy, with full resolution following intravitreal injections of ranibizumab.

Response to Ranibizumab Following Tachyphylaxis to Bevacizumab in a Patient With Radiation Maculopathy Following Stereotactic Fractionated Radiotherapy for Optic Nerve Meningioma

A 38-year-old man presented to our eye clinic 21 months after radiotherapy for optic nerve meningioma in the left eye. At initial assessment, he had a visual acuity (VA) of 6/36, a central retinal thickness of 531 µm, and minimal disruption of the foveal avascular zone. The decision was made to treat his condition with intravitreal injections of bevacizumab (Avastin; Roche). His left eye’s initial response to bevacizumab was very encouraging, with VA improving to 6/12 after 3 injections. However, this response was transient; after 6 injections, he had a VA of 6/18 and a central retinal thickness of 475 µm in the left eye. His treatment was then switched to intravitreal injections of ranibizumab (Lucentis; Novartis), and he experienced a complete resolution of his cystoid macula edema, with a final VA of 6/6 and a central retinal thickness of 264 µm in the left eye. This is an interesting case of tachyphylaxis to bevacizumab in a patient with radiation maculopathy, with full resolution following intravitreal injections of ranibizumab.

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