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Case Report

Worm in the Anterior Chamber of the Eye

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ABSTRACT

Dirofilaria is a rare zoonotic parasite with humans as accidental host. Bats, raccoons, cats, bears are the common primary hosts transmitting infection to humans through vectors like anopheles, aedes, culex mosquitoes. Case reports of ocular dirofilariasis have been published in different regions of country involving lids, periorbital structures, sub conjunctival tissue, intraocular space. We are reporting a case of dirofilaria floating in anterior chamber managed with surgical removal of worm in toto.

Keywords: Chemo paralysis; Vitreous Cavity; Anterior chamber; Dirofilariasis

CASE REPORT

A 45 year old female patient, resident of village kukra and housewife by occupation presented to our OPD with complaints of ocular pain, redness and diminution of vision in Right eye for last 5 days. Her BCVA in affected eye was 6/18 and N9. There was no history of trauma, recurrent redness, or any travel in past. On examination, lids were normal. Slit lamp examination revealed circumcorneal congestion with clear cornea. Anterior chamber examination showed 3+ cells and 2+ flare with worm floating freely inside the anterior chamber (Figure 1). Lens was clear with no reaction in vitreous cavity and normal fundus. Anterior segment and fundus examination was normal in left eye. Surgical removal of worm and anterior chamber wash was advised to the patient. Under topical anesthesia, a small side port incision was created and 0.5% lignocaine was injected in the anterior chamber for chemo paralysis. Worm was held with mcpherson forceps at the side port and removed. Anterior chamber lavage was done with irrigating solution. No other intraocular organism was detected per operatively. Dilated fundus examination post operatively revealed clear vitrous cavity with normal fundus examination on indirect ophthalmoscopy. Patient was advised topical antibiotic, topical steroids and topical cycloplegic eye drops. Sample was sent to our lab for histopathological diagnosis.

The helminth was diagnosed as dirofilaria on morphological features.

Blood investigations were within normal limits. Patient was followed up for 4 weeks and all symptoms subsided on treatment (Figure 2).

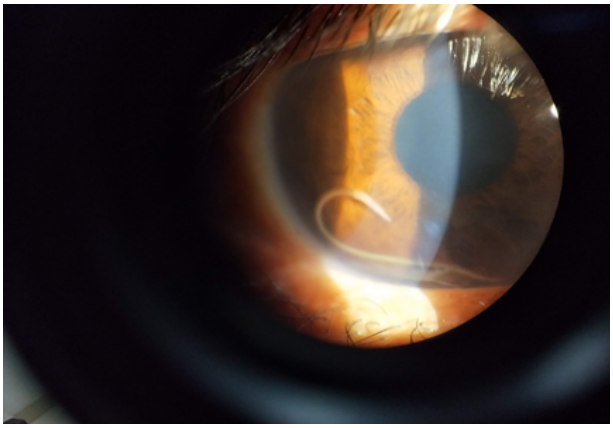

Figure 1: Worm floating in anterior chamber.

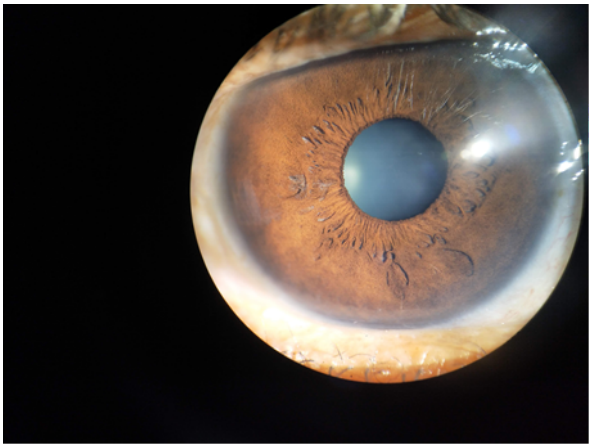

Figure 2: Post-operative picture of anterior chamber after 1 week.

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DISCUSSION

Dirofilariasis is a worldwide zoonotic filariasis. Human dirofilariasis is a zoonotic infection most commonly caused by Dirofilaria repens [1].

Common ophthalmic sites involved are subconjunctival space [2-6], eyelids, orbit [7, 8], anterior chamber [9], vitreous cavity [10]. Subconjunctival worm can also mimic as nodular scleritis [3].

Parasite in anterior chamber can migrate posteriorly, so it's better to constrict pupil with pilocarpine before taking patient to operating room [9].

CONCLUSION

Detailed slit lamp and fundus evaluation, surgical removal and subsequent identification of the worm by its morphological and anatomical features are the keys to appropriate management of such cases. Fine transverse striations on the cuticle and abundant somatic musculature helps in identifying the nematode [11].

Our case highlights the involvement of dirofilaria in anterior chamber in a patient with rural background and its effective management with surgical removal and diagnosis.

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