

Case report

An 80-year-old woman complained of left eye pain associated with blurring of vision for 3 days. On examination, her left eye vision was 6/60, not improving with pin hole. The left eye was injected and pupil was 3 mm with posterior synechiae. There was a localized cornea oedema inferiorly near the limbus. The most striking feature was the presence of a worm in the anterior chamber (Figure 1). It measured approximately 4 mm, was white in colour, semitransparent, and photosensitive. One end was rounded, while the other end was pointed. There was moderate anterior chamber reaction. Funduscopy of the left fundus was normal.

The patient was started on topical Bethamethasone 0.1% drops on a 2-hourly basis and Cyclopentolate 0.5% tds. Surgical evacuation of the worm was done and the specimen was sent for examination.

The parasitologist identified the worm from the genus *Dunnifilaria*, with the features closest to *Dunnifilaria ramachandrani* (Figure 2).

Peripheral blood film, stool, and urine examinations were negative for parasite infestation. Blood differential count did not show eosinophilia. Post surgical evacuation of the parasite, the patient had uneventful recovery.

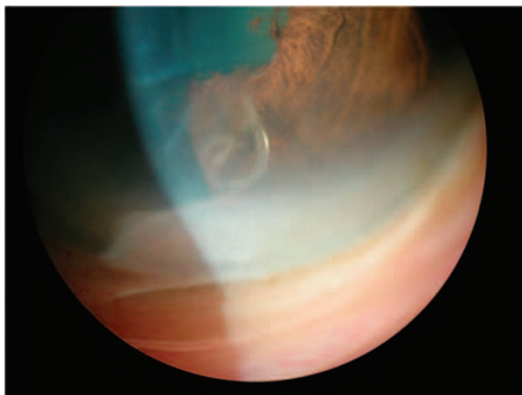


Figure 1 Worm in anterior chamber.



Figure 2 Microscopic feature of the filarial.

Comment

Intraocular worm infestation is an uncommon phenomenon. Live nematodes that have been found to affect the eye include *Loa loa*, *Onchocerca*, *Gnathostoma*, *Angiostrongylus*, *Toxocara* (visceral larva migrans), *Wuchereria bancrofti*, *Ascaris*, *Brugia malayi*, and *Thelazia*.¹

The most common infections in man with filariae of animal origin are caused by members of the genus *Dirofilaria*.² The infestation by the *Dunnifilaria* genus has not been reported in humans.

There are only three known species in this genus, which comprises *D. dilli*, *D. ramachandrani* and *D. meningica*.³ The primary host of *Dunnifilaria* is rodent.

Conflict of interest

The authors declare no conflict of interest.

References

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Sir, Quinine-induced coagulopathy: a risk factor for suprachoroidal haemorrhage

Quinine is widely used to treat leg cramps in the elderly.¹ Its use has long been associated with thrombocytopenia.² We report a case of quinine-induced thrombocytopenia manifesting with a suprachoroidal haemorrhage during cataract surgery.

Case report

A 75-year-old man underwent left cataract surgery. Visual acuity was 6/12 in both eyes. He took quinine sulphate 300 mg OD for leg cramps. His past medical and drug history was otherwise unremarkable. Peribulbar anaesthesia was given uneventfully. During phacoemulsification and removal of the final quadrant of the lens nucleus, the eye became tense, the red reflex reduced, and an anterior capsule tear extended posteriorly causing vitreous loss. Intravenous acetazolamide (500 mg) was given immediately, an anterior vitrectomy completed, a sulcus intraocular lens inserted, and the wound sutured.

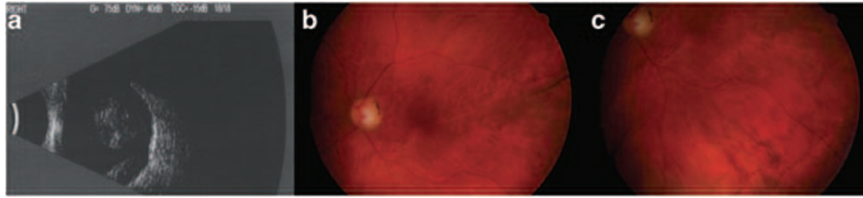


Figure 1 (a) B-scan ultrasonography of the left eye 1 day after surgery showing suprachoroidal haemorrhage. Colour fundus photographs of the left eye 4 months after surgery showing (b) residual choroidal macular folds and (c) peripheral pigmentary retinopathy following reabsorption of haemorrhage.

The following day, the visual acuity was hand movements. Fundus and ultrasound examination (Figure 1a) confirmed extensive suprachoroidal haemorrhage. A full blood count (FBC) showed thrombocytopenia (platelet count $87 \times 10^9/l$). Haematology opinion was sought; investigations including a blood film and autoimmune screen were normal. Quinine was stopped and the platelet count has gradually risen. With conservative management, the left visual acuity has improved to 6/6 at 4 months post-surgery despite the presence of macular choroidal folds (Figures 1b and c).

Comment

Expulsive suprachoroidal haemorrhage is a rare but potentially devastating event during intraocular surgery. Occult thrombocytopenia is the only identifiable risk factor for haemorrhage in this patient. Extensive haematological investigation has strongly suggested quinine drug-induced immune thrombocytopenia (DITP). The rise in platelet count since cessation of quinine supports this.

Quinine causes DITP by stimulating production of antibodies against platelet membrane glycoproteins causing platelet destruction. Treatment includes drug withdrawal and control of bleeding.² We believe this is the first reported case of quinine-induced thrombocytopenia associated with intraocular haemorrhage.

Awareness of quinine use in the elderly population is important. The Royal College of Ophthalmologists local anaesthetic guidelines suggest a pre-operative FBC only for patients with a history of systemic disease or abnormal examination.³ We feel that occult thrombocytopenia significantly contributed to the suprachoroidal haemorrhage in this case and recommend an FBC prior to intraocular surgery for all patients taking quinine.

Conflict of interest

The authors declare no conflict of interest.

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Sir, Cost effectiveness of phacoemulsification in developing countries

I read with interest the article by Hennig *et al*¹ describing the outcomes of high-volume phacoemulsification in Nepal. Although patients' expectations of cataract surgery will undoubtedly increase in future, it is important to remember that more than 18 million people in developing nations are blinded by cataracts, with the number increasing each year.

Studies have shown that the percentage of patients with good visual outcomes with phacoemulsification is comparable to that of manual small-incision cataract surgery (MSICS).^{2,3} The reported cost for consumables performing phacoemulsification with a rigid intraocular lens (IOL) was US\$0.50 more than MSICS.¹ However, this cost differential can become quite significant when the total volume of cases is considered. For the 8955 phacoemulsification surgeries performed in this series, an additional \$4477.50 could have been saved with MSICS, which can be used for consumables for more than 1000 additional patients. In addition, the authors rightly point out that this cost does not take into account the cost of the phaco machine and its maintenance. In contrast, MSICS is considerably less dependent on expensive equipment and costs less in consumables.^{2–4}

It would be interesting to know the density of the cataracts, whether sutures were required to close the 5 mm phaco wound, and the resultant astigmatism. It has been shown that MSICS causes less postoperative oedema,^{2,3} which may be quite significant in phacoemulsification, depending on the density of the nucleus. The majority of patients in underserved areas of developing countries usually present only when the cataracts are quite advanced. One potential advantage of phacoemulsification may be the slightly lower amount of surgically induced astigmatism^{3,5} but a 5 mm wound may cause more astigmatism than with a foldable IOL.