

Case report

Sir,

External ocular myiasis due to *Oestrus ovis* in a tourist returning from North Africa

The sheep nasal botfly *Oestrus ovis* is the commonest of several species of dipteran fly whose larvae are obligatory parasites in the nasal cavities and frontal sinuses of sheep but may cause infestation (myiasis) in man. Ocular myiasis is rarely reported in the UK. We report a case of imported external ocular myiasis due to *O. ovis* presenting in London.

On her return from North Africa a 42-year-old female tourist presented to the accident and emergency department of St George's Hospital, London, with a 3 day history of a painful red watery left eye. Her symptoms had begun while walking on a beach in Tunisia, when she reported a sudden onset of foreign body symptoms that she had presumed to result from sand blown into her eye. On examination there was conjunctival hyperaemia with moderate papillae and a mild punctate keratitis in the left eye. On tarsal eversion a single motile larva, measuring 1 mm in length, was observed on the palpebral conjunctiva in the superior fornix. Ocular examination was otherwise normal. The larva was removed with a sterile cotton bud and identified by light microscopy as the larva of the sheep nasal botfly *Oestrus ovis*. The patient was prescribed g. chloramphenicol 0.5% q.d.s. to the affected eye. Her symptoms and signs had resolved 3 days later.

Comment

The larvae of *Oestrus ovis* are hatched from their eggs in the vagina of the adult female, who ejects them into the nostrils of sheep¹ in a stream of milky white fluid, possibly without direct contact.² Migration to the frontal sinuses is followed by maturation for 8–12 months. The larvae are subsequently sneezed out and pupate on the ground for a period of 3–6 weeks. The lifespan of the adult fly is about 4 weeks. The human is an incidental host and becomes involved when larvae are ejected onto the ocular surface instead of the nasal mucosa of sheep. In humans the larvae are unable to mature and survive for up to 10 days. Sudden onset of foreign body symptoms is followed by pain and inflammation. A punctate keratitis is common and small conjunctival haemorrhages may be seen. Single or multiple larvae are observed in the conjunctival sac. The condition is normally benign and self-limiting.³ Invasion of the orbit or globe, more typical of other species, is rarely reported due to *O. ovis*⁴ but the resulting panuveitis may be severe. Management of external ocular myiasis involves careful removal of the organisms with forceps aided by topical anaesthetic to slow their motility. Topical administration of corticosteroids for symptomatic relief and antibiotics to prevent bacterial contamination have been recommended.³

Oestrus ovis is widespread in Africa and the Middle East, where the annual incidence of ocular myiasis is estimated to be 10 per 100 000,⁵ but is also reported in Australia,⁶ North America,^{3,7} and Southern Europe.⁸ Reports of external ocular myiasis due to *O. ovis* in the UK, either indigenously acquired^{9,10} or imported,¹¹ are rare. A history of recent travel to endemic areas should prompt a high index of suspicion and careful examination of the conjunctival fornices for larvae.

References

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