

External Localisation of Ophthalmomyiasis: A Case Report in South Morocco

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Abstract

Introduction: External ophthalmomyiasis results from infestation of the conjunctiva by the larval form of flies in the order of Diptera.

Material and methods: A 31-year-old man was referred to unilateral eye pain and Epiphora

Result: Slit lamp examination showed conjunctival injection and five small white and translucent larvae in inferior fornix.

Discussion: External conjunctival ophthalmomyiasis represents the most common form of ophthalmomyiasis. This is due to the presence in the conjunctiva of larvae of insects belonging to the order of Diptera and the family of Oestridae Ala.

Conclusion: The infestation of a human eye with maggots of a fly is a rare disease.

Keywords: Ophthalmomyiasis, Conjunctive, Oestrus ovis

Introduction

External ophthalmomyiasis results from infestation of the conjunctiva by the larval form of flies in the order of Diptera [1]. Other forms of ophthalmomyiasis include ophthalmomyiasis interna and orbital ophthalmomyiasis, depending on the site of infestation [2].

This entity is commonly seen in warm climates and places where close contact to farm animals is possible. *Oestrus ovis* (sheep nasal botfly) is one of the most common causes of human myiasis.

Ophthalmic myiasis has been reported from different parts of the world. Most of these reports are limited to one case [3-10].

In Morocco many cases are reported from the northern part of the country, and in urban areas.

In our work we report a case of external ophthalmomyiasis admitted at 5HM Guelmim (south Morocco) in rural area.

Case

A 31-year-old man was referred for unilateral eye pain and epiphora starting 2 days previously. There was a history of an insect striking the eye, a few hours before the onset of eye pain and inflammation.

Results

On physical examination, our patient's best corrected visual acuities were 20/20 in both eyes. Slit lamp examination showed conjunctival injection and five small white and translucent larvae in inferior fornix. They are mobile and photophobic. There was no inflammatory chamber reaction in either eye. The fundus examination was normal.

Then, all the larvae's were extracted. We proceeded to an irrigation followed by topical ant biotherapy.

After 2 days the clinical signs had disappeared nearly completely. The larva was

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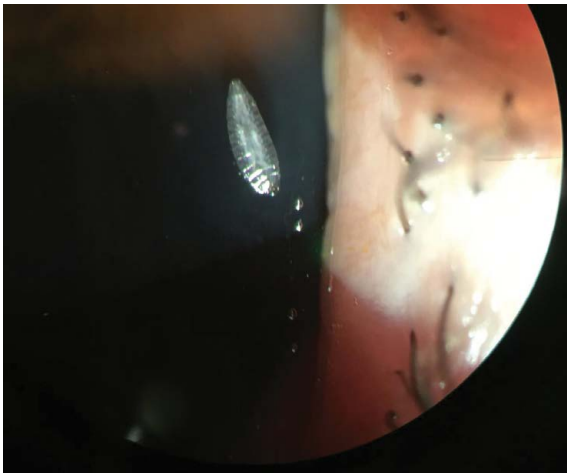


Figure 1: Larva of Oestrus ovis, 40X.

identified as a first-instar larva of *Oestrus ovis*. This insect causes external ophthalmomyiasis. The larva develops into an adult fly. This larva is segmented and has two large dark oral hooks, connected to a white cephalopharyngeal skeleton (Figure 1).

Discussion

Ophthalmomyiasis is the infestations of ocular tissues caused by myiasis larvae. Although the conjunctival myiasis is present in different continents, the majority of cases have been described in the Mediterranean and middle East [11,12].

External conjunctival ophthalmomyiasis represents the most common form of ophthalmomyiasis. This is due to the presence in the conjunctiva of larvae of insects belonging to the order of Diptera and the family of Oestridae Ala. The two most species incriminated in myiasis are *O. ovis* and rarely *Rhinoestrus purpureus*.

Patients with ophthalmomyiasis externa due to *Oestrus ovis* typically present with a history of close contact with sheep or goats in early summer to fall. The symptoms of conjunctival ophthalmomyiasis are similar to those of acute catarrhal conjunctivitis.

Treatment of this condition is by removal of the larvae. Paraffin oil can be used to stop the oxygen supply, thus aiding removal of the larvae. Topical corticosteroids and antibiotics

can be used to relieve the inflammation and prevent bacterial contamination. Follow-up examination by an ophthalmologist is recommended to avoid the possible complication of External ophthalmomyiasis [13].

Conclusion

The infestation of a human eye with maggots of a fly is a rare disease. The parasites are very mobile and clinical signs are variable. A penetration into the eye is possible. Although external ophthalmomyiasis is an uncommon condition in Morocco, early diagnosis and management is important in preventing complications.

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