

# Conjunctival ophthalmomyiasis: about a case in southern Morocco

## Abstract

External ophthalmomyiasis is caused by the infestation of ocular tissues by larvae belonging to the family of oestrids. We report a case of external ophthalmomyiasis in a soldier on duty without close contact to goats or sheep.

**Keywords:** external ophthalmomyiasis, soldier, oestrus ovis

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## Introduction

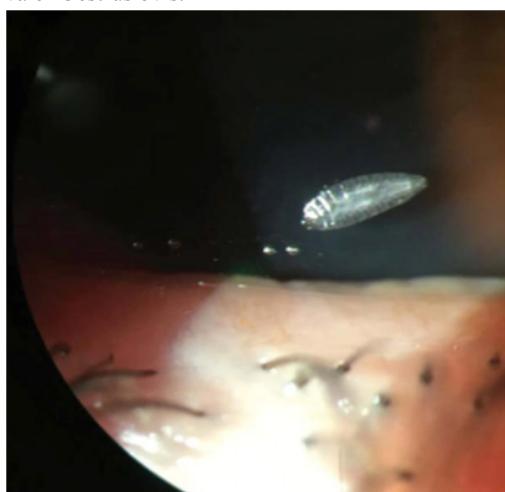
External ophthalmomyiasis is caused by the infestation of ocular tissues by larvae belonging to the family of oestrids.<sup>1</sup> Although known in all regions, its frequency is higher in the Mediterranean basin.<sup>2</sup> In our work, we report a case of external ophthalmomyiasis admitted to Guelmim Military Hospital (southern Morocco).

## Materials and methods

A 31-year-old patient on duty in a military barrack was admitted urgently for a foreign body sensation associated with pain and tearing of the left eye. He reported to have received a fly in his eye a few hours earlier.

## Results

Visual acuity was 10/10 in both eyes. Slit lamp examination revealed hyperemia of the tarsal and bulbar conjunctiva and five small white translucent larvae at the inferior fornix (Figure 1). The larvae were photophobic. There was no inflammatory reaction of the anterior chamber. The fundus was normal. After application of topical anaesthesia, the larvae were removed using microsponges and saline. Topical antibiotic therapy was prescribed. After 2 days, clinical signs had disappeared almost completely. The larva was identified as a first stage larva of *Oestrus ovis*.



**Figure 1** Larva of *Oestrus ovis*

## Discussion

The clinical signs of ophthalmic myiasis are summarized by the signs of acute conjunctivitis. The interrogation notes a direct eye contact with a fly. This was the case in our patient. By slit lamp examination, we find larvae belonging to the *Oestrus* or, rarely, the *Rhinoestrus purpureus*. It is a cosmopolitan affection but it is especially present among shepherds.<sup>3</sup> Man, is an accidental host.

The treatment is based on the elimination of larvae. Antibiotics may be prescribed to prevent superinfection. In the absence of treatment, there is risk of internal ophthalmomyiasis, which is a serious condition that can engage the visual prognosis.<sup>4</sup> The originality of our case is that the victim was a soldier on duty without close contact to goats or sheep. It was a military zone forbidden to pets. There are not many cases in literature that have been reported in the absence of contact with sheep or goats.<sup>2,5,6</sup>

## Conclusion

Ocular myiasis a condition that is very common among shepherds. Its frequency outside pastoral areas is relatively rare. It is a benign zoonosis when diagnosed and treated early. Treatment consists of the extraction of these larvae combined with saline and local antibiotic therapy.

## Acknowledgments

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## Conflicts of interest

Author declares there is no conflicts of interest.

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