

# Ocular myiasis: A challenge, not so rare

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## Abstract

Human myiasis refers to parasitic infestation of body tissues by larvae of several different fly species. It is well-documented in the literature however ocular myiasis is a condition which is easy to diagnose but at the same time very challenging to manage. We hereby report this entity in a female who presented with complaints of worms coming out from her eyes which was preceded by some dust going in her eyes 4 days back. The patient in this case had already taken out 4 maggots on her own before presenting to the eye out patient department of the hospital.

**Key Words:** Maggots, Ocular myiasis, Local anaesthesia.

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Received Date: 02/06/2018 Revised Date: 10/07/2018 Accepted Date: 23/08/2018

DOI: <https://doi.org/10.26611/1009727>

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Accessed Date:  
30 August 2018

## INTRODUCTION

Myiasis is defined as a disease caused by the infestation of dipterous larvae in various body wounds and orifices<sup>1,2</sup>. The distribution of myiasis is worldwide, with more cases being reported from tropical, subtropical, and temperate areas. It occurs predominantly in rural areas in women with poor hygiene, mentally challenged, debilitated or immunocompromised patients. The diagnosis of ocular myiasis is easy, however, the management can be very challenging in some cases.

## CASE REPORT

Here we report a case of 35-year-old lady who presented to ophthalmology department of a hospital in northern India, with history of some dust particle in her left eye 4 days back, following which she had pain and foreign body sensation in her left eye with appearance of worms in her eyes which were moving. She attempted to remove

the worms on her own and was able to remove 4 worms on her own. She decided to come to the hospital when she was not relieved of her symptoms and the worms. On examination she had stable vitals, without any associated factors and on local examination there were multiple tiny maggots of creamish white colour about 3 to 4 mm buried in the conjunctiva (Figure 1). The maggots hid as soon as light was thrown on them, hence posing difficulty in their removal and making management of these cases a challenge. Local anaesthesia aided in removing the maggots easily from the eye as after instillation the mobility of the maggots also slowed down and hence the removal became easy and 5 more maggots were removed in to She was started on topical antibiotics and analgesics. On follow up she remained asymptomatic and got better.



Figure 1: Maggots seen under the slit lamp

## DISCUSSION

Human myiasis can be classified as cutaneous myiasis, ocular myiasis, urogenital myiasis and intestinal myiasis based on the site involved<sup>4</sup>. Although maggot infestations are common in the tropics, only between 5 and 14% of all cases involve the ocular tissues<sup>5,6</sup>. The treatment consists of removal of the parasitic larvae and through cleansing of affected area with hypertonic saline, medical turpentine oil or petroleum jelly to immobilise the larvae. The possible source in the present case may be the eggs, which were transmitted to the eye via the dust. The flies laid eggs on the dust particles and the dust went into the eye leading to ocular myiasis. Though the patient knew about the moving worms in her eye, still she presented late to the hospital after making several attempts to remove the worms herself. Myiasis occurs predominantly in rural areas and is associated with poor hygiene practices and low education level. Ocular myiasis can be very challenging to treat completely and has dangerous complications if left partially treated or untreated. To conclude, ocular myiasis is an entity very easy to diagnose but very difficult to manage, as wrong management can lead to paranasal sinus extension or intracranial extension leading to grave complications. However, in recent years, the broad-spectrum

antiparasitic agent, ivermectin, has been successfully used as a non-invasive means to treat orbital myiasis<sup>7</sup> which will help in reducing the grave complications associated with this entity.

## REFERENCES

1. Kataria U, Siwach S, Gupta S. Myiasis in female external genitalia. *Indian J Sex Transm Dis.* 2013; 34: 129–31.
2. Raja AM, Vidhyashree, Pushpa Kotur P. Vulvalmyiasis in rural setting: a case report. *Int J Adv Res.* 2014; 2: 422-4.
3. Sherman RA. Wound myiasis in urban and suburban United States. *Arch Intern Med.* 2000;160: 2004–14
4. Janovy J Jr, Schmidt GD, Larry S. Gerald D. Schmidt and Larry S. Roberts' *Foundations of Parasitology*. Dubuque, Iowa: Wm. C. Brown; 1996.
5. Wilhelmus KR. Myiasis palpebrum. *Am J Ophthalmol.* 1986; 101:496–8.
6. Scott HG. Human myiasis in North America (1952-1962 Inclusive) *Fla Entamol.* 1964; 47:255–61.
7. Osorio J, Moncada L, Molano A, Valderrama S, Gualtero S, Franco-Paredes C. Role of Ivermectin in the treatment of severe orbital myiasis due to *Cochliomyia hominivorax*. [Last cited 2006 Sep 15]; *Clin Infect Dis.* 2006 43:e57–9. Available from: <http://www.journals.uchicago.edu/doi/full/10.1086/507038>.

Source of Support: None Declared  
Conflict of Interest: None Declared