INTRODUCTION

Myiasis is the infestation of live human and vertebrate animals with dipterous larvae, which, at least for a certain period, feed on the host’s dead or living tissue, liquid body substances, or ingested food [1]. Maggots can infect any organ or tissue accessible to fly oviposition. Adult flies feed on faeces or decaying meat or fish, and a single female fly deposits eggs, which are capable of penetrating tissue, and thus cause immediate problems depending on the body site [2]. Myiasis is rare and the average practitioner of paediatrics is unlikely ever to see a case [3]. Aural myiasis is not a common manifestation in the field of otorhinolaryngology, and occurs frequently in children [4-7]. This report describes a case of aural myiasis caused by *Wohlfartia magnifica* in an infant.

CASE REPORT

A five-month-old male infant presented to the Emergency Department for evaluation of irritability and right otorrhoea of eight hours duration. On examination he was irritable, crying continuously and a blood-tinged right aural discharge was noted. Otoscopic examination revealed an animate, whitish maggot which partially occupied the right external auditory canal. The tympanic membrane showed a hyperaemic inflammation. The maggot was removed with a combination of suctioning and microsurgical forceps under an operative microscope. Saline irrigation and concomitant suction were also used. Additionally, topically (neomycin) and oral (amoxicillin 40 mg/kg in 3 divided doses) antibiotics were given to avoid secondary infection.

The larva was sent to the Microbiology Unit in 70% alcohol solution, and was identified as *Wohlfartia magnifica* by their stigmatic structures.

DISCUSSION

Foreign bodies of the ears are a common and challenging problem in children [8]. Both live and non-vegetative, inanimate foreign bodies are encountered in external auditory canals in children [7]. Aural myiasis is rare and occurs most often in children younger than 10-y and in mentally retarded adults [9]. Infestations of the nose and ears are extremely dangerous because of the possibility of penetration into the brain; the fatality rate is 8% in such cases [7]. Most infestation occurs in developing countries; however, the prevalence has decreased over the years, and now it is very rare. The clinical spectrum is wide from maggots in the ear to otalgia, otorrhoea, perforation of drum, bleeding, itching, roaring sound, tinnitus, furuncle of the external ear, and restlessness [6, 9]. Diagnosis is easy through otomicroscopy, which reveals the presence of maggots [7, 9].

Most of the causative agents of aural myiasis belong to the *Sarcophagidae* family. The *Sarcophagidae* include two obligate parasites that can infest humans: *Wohlfartia magnifica* and *W. vigil*. *Wohlfartia magnifica*, although rare, is frequently seen as a causative agent of human myiasis in the Mediterranean Basin, Eastern Europe and the Middle and Far East [10]. *Wohlfartia magnifica* is an obligatory parasite, depending on its host, without which it cannot complete its development. The adult insect limits its period of flying to the hottest month of
the year, and its egg-laying activities occur during the hottest hours of the day. The female is viviparous and can lay larvae on wounds and in natural cavities of man and animals. The larvae get into subcutaneous tissues of the host, at whose expense they develop [2, 7, 8, 10, 11]. The treatment of aural myiasis is simple in early manifestation stage, such as removal of maggots and cleansing lesion with 70% ethanol, 10% chloroform, normal saline, oil drops, urea, dextrose, creatine, topical ivermectine or iodine saline [6, 7, 9]. So, the treatment of choice is still debated. Whatever substances are used, however, is essential to mechanically remove the larvae. Prophylactic antibiotic therapy is also recommended.

In conclusion, maggot infestation of humans is now an uncommon problem because of improvements in living standards. In particular, the aural myiasis is a rare clinical state; however, the possibility of its occurrence always exists.

Key words: myiasis, maggots, Diptera, infant.

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