Oral myiasis in mentally challenged patient: a case report

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Received: 02/05/2010
Accepted: 01/09/2010

Abstract
Myiasis is the infestation of live human and vertebrate animal with Dipterous larvae which feed on host’s dead or living tissue. This condition is a result of neglected approach towards oral hygiene along with mental and physical challenges of patient. A case of oral myiasis in the maxillary anterior region in an 18 years old female with neurologic deficit caused by the larvae (maggots) is reported. The management consists of manual removal of larvae by topical application of turpentine oil, oral therapy with Ivermectin and surgical debridement of oral wound.

Key words: Myiasis, dipterous, ivermectin.
Introduction
Term “Myiasis” is derived from Greek word “Myia” meaning fly which was first introduced by Hope (1). Oral myiasis is the condition in which there is an invasion of oral tissues or wound with larvae of houseflies commonly known as maggots (2). It occurs as a result of female flies depositing eggs or larvae on open wounds or decaying tissues. The larvae hatch in the tissues and later migrate out in an attempt to reach the soil to pupate. Myiasis can be classified as obligatory (when larvae develop in living tissue), facultative (when maggots feed on necrotic tissues) (3). The most common anatomic sites for myiasis are nose, eye, lung, ear, anus, vagina and more rarely mouth (4). This is common in low socio-economic status people with neglected oral hygiene and physical or mental retardation.

Case Report
An 18 years old girl with neurological deficit and of low socioeconomic status referred to the Department of Oral and Maxillofacial Surgery, Institute of Dental Sciences, Bareilly with chief complaint of swelling and pain in upper front region of mouth. Extraoral examination revealed acute and diffused upper lip swelling which was non fluctuant on palpation (Fig. 1). and analgesics were prescribed for 5 days along with ivermectin 6 mg for 3 days. The patient was recalled everyday for repeated irrigation for next 10 days. The wound was left open to heal by secondary intention.

Discussion
Oral myiasis is a rare condition and can be caused by several species of Dipteran fly larvae and may present secondary to serious medical conditions. This condition is associated with poor oral hygiene, alcoholism, senility, supplicative lesions, severe halitosis and other conditions (5).
The myiasis is diagnosed clinically based on the presence of maggots of Musca nebulo which is the commonest Indian housefly. The risk factors for oral myiasis are poor oral hygiene, physical and mentally challenged patients who were unable to protect themselves from invasion and growth of larvae in oral cavity. The common housefly usually deposits the egg or larvae in the gingival sulcus, mucous or raw tissue surface which gets stagnated under unprotected warm, humid climate of the wound and burrows deep into the tissues. Larvae are grayish white with transverse rows. The hatching is usually completed in less than a week time. The increase in size and crawling movement may give rise to itching and discomfort. The treatment is the mechanical removal of maggots one by one but a systemic treatment with ivermectin, a semisynthetic macrolide antibiotic (6). The prevention of human myiasis can be done by proper health awareness and education but unfortunately in developing countries some people live in low socioeconomic conditions predisposing the occurrence of infestation.

References

Acknowledgments
The authors would like to thank Dr. Deepti Jakhmola, Dental Surgeon for her critical review and valuable suggestions.