

## Oral myiasis: A case report

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### ABSTRACT

Oral Myiasis is a rare pathology in humans and is associated with poor oral hygiene, alcoholism, senility, supurating lesions, severe halitosis and others conditions. The treatment is a mechanical removal of the maggots one by one but a systemic treatment with Ivermectin, a semi-synthetic macrolide antibiotic, have been used for treatment for oral myiasis. We present a case report of a 32-year-old man indigent, alcohol-dependent with an extensive necrotic area and acute swelling in upper lip and fetid odor. The patient's management included topic use of gencian violet, oral therapy with ivermectin (6 mg orally), surgical exploration to remove the larvae and necrotic tissue. After the complete larvae removal the swelling and the wounds were healing normally, the patients was referred to plastic surgery to repair tissue damage. The prevention of human myiasis is by education, but unfortunately in the developing countries some people live in low social condition, predisposing the occurrence of the infestation.

**Key words:** *Myiasis, oral infestation, ivermectin.*

### INTRODUCTION

The term myiasis (Greek: myi= fly) is used for refer the infestation of living tissues of humans and animals, by dipterous eggs or larvae (1).

The oral cavity is rarely affecting by this infestation (2) and the oral myiasis has been associated with poor oral hygiene, alcoholism, senility, supurating lesions, severe halitosis and others conditions (1-5).

The myiasis can be classified as obligatory, when larvae develop in living tissue, or facultative, when maggots feed on necrotic tissue. The obligatory myiasis is more harmful for the humans. The most common anatomic sites for myiasis are the nose, eye, lung, ear, anus, vagina and more rarely, the mouth (3).

The aim of this papers is to report an extensive case of myiasis in upper lip.

### REPORT OF CASE

A 32-year-old man indigent, alcohol-dependent, living on streets, was brought to Odilon Behrens Hospital (OBH), in Belo Horizonte – Brazil, and presented with acute upper lip swelling with an extensive necrotic area and fetid odor. The oral examination revealed a diffused indurated swelling nonfluctuant on palpation (Fig. 1). In addition, general symptoms including pain, fever and malaise were present. The patient was drunk, presenting a poor oral and general hygiene and was confused about the evolution time. The surface of the swelling revealed several orificies which lived a number of maggots, involving intra-orally mucolabial fold (Fig. 2). The management was performed by Oral and Maxillofacial Surgeons from Surgery and Pathology Department of de School Dentistry of the Federal University from Minas Gerais-Brazil. Complementary treatment to the general symptoms was carried out in the clinic internal medicine of the OBH.



**Fig. 1.** Appearance of patient at presentation, showing a indurated swelling of the upper lip.

**Fig. 2.** A view of the upper lip showing the sockets after removal of the maggots and debridement of necrotic tissue.

**Fig. 3.** A number of larvae removed from the sockets.

The patient's management included topic use of gencian violet, oral therapy with ivermectin (6 mg orally), surgical exploration to remove the larvae (Fig. 3) and necrotic tissue. This procedure was carried out three times for remove the remaining maggots and was observed, in the last procedure after 5 days of hospitalization, which the larvae were mobile. After the complete larvae removal the swelling and the wounds were healing normally, the patients was referred to plastic surgery to repair tissue damage.

## DISCUSSION

Myiasis occurs by dipterous larvae developing in decaying tissues and the developmental transition via the larval stage requires an intermediate host and the number of developing larvae depends on the number of viable eggs deposited (4). The late diagnostic and the number of maggots in this report, determined an extense tissue damage, have been necessary a esthetic surgery.

The myiasis is diagnosed clinically based on presence of the maggots (5-7) but the classification of the larvae rarely has been made. In the present case was no possible to identify the larvae.

The risk factors for oral myiasis include suppurative lesions, trauma in the face, mouth-breathers, extraction wonds and others conditions (6-9). In this report it was not possible to identify a local condition in the upper lip, however is possible suppose that trauma was the most probable local condition in the development of myiasis in an alcoholics and abandoned person.

The traditional management for myiasis is the mechanical removal of the maggots (6,7). When there are multiple larvae and in advanced stages of maggots development and tissue destruction, local application of several substances

have been used to ensure complete removal of all larvae (2-5,7). Recently a systemic treatment with Ivermectin, a semi-synthetic macrolide antibiotic, have been used for treatment for oral myiasis (10).

In the present case after 5 days, the maggots were mobile despite the ivermectin therapy. The careful surgical removal of the larvae and the adequate debridement of necrotic tissue were the efficient treatment.

The prevention of human myiasis is by education, but unfortunately in the developing countries some people live in low condition, predisposing the occurrence of the infestation.

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