CASE REPORT

Cavitary myiasis mimicking peritonsilar abscess

Miíase cavitária simulando abscesso periamigdaliano

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Introduction

Myiasis is defined as an infestation of tissues and organs caused by fly larvae. More than 150 species of flies can cause myiasis in humans.\textsuperscript{1} They are classified as cutaneous, subcutaneous, or cavitary.\textsuperscript{2} The condition is more prevalent in tropical countries and occurs preferentially in the elderly, the disabled, and frail individuals.\textsuperscript{3}

The larvae can cause necrosis and destruction of infected tissues, resulting in a variety of symptoms, depending on the affected sites and the degree of infestation. Although the diagnosis is often evident, it may have varied clinical presentations, simulating other conditions and complicating early diagnosis.

Case report

A 73-year-old female patient, had fever for one week, asthenia, odynophagia, and daily episodes of a small volume of epistaxis through the left nasal cavity. The patient denied expelling any foreign body through the oral or nasal cavity. She was treated in the Emergency Unit and referred to the otorhinolaryngology service of a tertiary hospital on the following day. She had had cacosmia and foul-smelling nasal crusts for three years. She reported diabetes and hypertension, without adequate control.

On admission, the patient was afebrile, oriented, and cooperative, with crackles in the lung bases and otorhinoscopy showing mucopurulent secretion in the left external auditory canal. Peritonsillar bulging and hyperemia were observed, which extended to the soft palate. Considering the initial suspicion of peritonsillar abscess, puncture of the oral bulge was performed, but no secretion was drained. She was hospitalized and intravenous antibiotic therapy with ceftriaxone and clindamycin was initiated. On the second day of hospitalization, she was submitted to a second puncture, also without drainage, but with evidence of larvae coming out through the mouth and through the left nostril, minutes after the procedure.

The patient developed septicemia in the following hours and was transferred to the intensive care unit due to the decreased level of consciousness and blood desaturation, requiring intubation and mechanical ventilation.

Iodoform was applied to the oral cavity and nasal passages and ivermectin was administered through the nasogastric tube at an approximate dose of 300 \textmu g/kg, plus wide-spectrum antibiotics with piperacillin/tazobactam and vancomycin. Otorhinolaryngological examination was

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performed daily, with removal of larvae, totaling approximately 150 larvae removed after 72 h. She underwent computed tomography of the nose and paranasal sinuses, temporal bones, skull, and lung (Fig. 1).

Despite the complete removal of the larvae in the oral and nasal cavity, the patient died due to respiratory failure secondary to pneumonia on the 30th day of hospitalization.

**Discussion**

The patient had a large number of larvae that caused major destruction of local tissues. Due to the destructive and invasive characteristics of the larvae, the initial presentation simulated a peritonsillar abscess, but considering the clinical history and evolution, the initial site of infestation seems to have been the left nasal cavity. Given the previous clinical history, the diagnostic possibility of atrophic rhinitis was suspected, a pathology that sometimes is associated with nasal myiasis. However, as the patient sought medical care only during the picture of cavitory myiasis, the diagnostic conclusion of atrophic rhinitis became untenable.

The goal of treatment is to remove all invading organisms. The patient was treated with topical and oral medications associated with mechanical extraction, with complete elimination of larvae in approximately five days. Nasal myiasis may present with epistaxis, nasal obstruction, rhinorrhea, cacosmia, facial pain, and headache; it is equally prevalent in both genders.

**Final comments**

This case showed an atypical presentation, initially mimicking a peritonsillar abscess. Literature has proposed several treatments for cavitory myiasis, ranging from mechanical extraction to the use of topical, oral, and intravenous substances; however, there is no consensus on the best treatment for cases of oral or nasal myiasis. Perhaps abetted by the patient’s age and comorbidities, the outcome was death from aspiration pneumonia.

**Conflicts of interest**

The authors declare no conflicts of interest.

**References**


