CASE REPORT

Cavitary myiasis mimicking peritonsilar abscess

Miíase cavitária simulando abscesso periamigdaliano

Marcos Aurélio Araújo Silveira a,∗, Sebastião Diógenes Pinheiro a,b, Viviane Carvalho da Silva c, Mateu Aguiar de Azevedo a, Raphael Oliveira Correia a

a Faculdade de Medicina, Universidade Federal do Ceará (UFC), Fortaleza, CE, Brazil
b Universidade de São Paulo (USP), São Paulo, SP, Brazil
c Hospital Universitário Walter Cantidio, Faculdade de Medicina, Universidade Federal do Ceará (UFC), Fortaleza, CE, Brazil

Received 15 December 2014; accepted 31 January 2015
Available online 1 April 2015

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.1 They are classified as cutaneous, subcutaneous, or cavitary.2 The condition is more prevalent in tropical countries and occurs preferentially in the elderly, the disabled, and frail individuals.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 otoscopy 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 μg/kg, plus wide-spectrum antibiotics with piperacillin/tazobactam and vancomycin. Otorhinolaryngological examination was

http://dx.doi.org/10.1016/j.bjorl.2015.01.005
1808-8694/© 2015 Associação Brasileira de Otorrinolaringologia e Cirurgia Cérvico-Facial. Published by Elsevier Editora Ltda. All rights reserved.

Please cite this article as: Silveira MA, Pinheiro SD, da Silva VC, de Azevedo MA, Correia RO. Cavitary myiasis mimicking peritonsilar abscess. Braz J Otorhinolaryngol. 2015;81:336–8.

∗ Corresponding author.
E-mail: maasilveira@bol.com.br (M.A.A. Silveira).
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 cavitary 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 cavitary 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

1. Al-Ismaily M, Scully C. Oral myiasis: report of two cases. Int J Paediatr Dent. 1995;5:177–9.
2. Ramalho JRO, Prado EP, Santos FCC, Cintra PPVC, Pinto JA. Milase nasal: relato de caso. Rev Bras Otorrinolaringol. 2001;67:581–8.
3. Ribeiro FAQ, Pereira CSB, Alves A, Marcon MA. Tratamento da miíase humana cavitària com ivermectina oral. Rev Bras Otorrinolaringol. 2001;67:755–61.

4. Zeltser R, Lustmann J. Oral myiasis. Int J Maxillofac Surg. 1988;17:288–9.

5. Manfrim AM, Cury A, Demeneghi P, Jotz G, Roithmann R. Miíase nasal: relato de caso e revisão da literatura. Arq Int Otorrinolaringol. 2007;11:74–9.

6. Sharma H, Dayal D, Agrawal SP. Nasal myiasis: review of 10 years experience. J Laryngol Otol. 1989;103:489–91.