CASE STUDY

Laryngeal Leishmaniasis as a Differential Diagnosis of Glottic Leukoplakia

Leishmaniasis laríngea como diagnóstico diferencial de leucoplasia glótica

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Introduction

Leishmaniasis is the general denomination given to the infection caused by any species of the Leishmania protozoan genus transmitted in Europe, Asia and Africa by sand flies (Phlebotomus) and by species of Lutzomyia in America.1

It is endemic to the Mediterranean basin and its incidence has increased in recent years in connection with immunodepression status.2 It gives rise to 4 clinical syndromes: visceral leishmaniasis, diffuse cutaneous leishmaniasis, localized cutaneous leishmaniasis and mucocutaneous leishmaniasis. Primary mucosal involvement (in isolation) is relatively frequent in Latin America but is considered exceptional in Europe. The nasal fossae are affected in 90% of cases of mucosal leishmaniasis. The isolated involvement of the larynx is considered particularly rare.3–4

We report here a case of primary laryngeal leishmaniasis (in isolation), in which the case history and the examination results pointed to an initial diagnosis of malignant epithelial neoplasia.

Case Report

A male patient, 64 years old, exposed to undomesticated animals of the canis species, a long-standing moderate smoker and drinker, came to the clinic complaining of a dysphonia lasting for 10 months. A fibrolaryngoscopic examination was performed and revealed a leukoplakic lesion in the middle third of the left vocal cord, without altering its mobility (Fig. 1). In view of the suspicion of neoplasia, exeresis of the lesion was performed using direct laryngoscopy and it was sent for pathological analysis (Fig. 2); in the sub-epithelial connective tissue, it is possible to observe a dense inflammatory reaction comprising lymphocytes, plasma cells and abundant histiocytes bearing amastigote forms of Leishmania, stained with Giemsa. No signs of histological malignancy were observed.

An immunological study was conducted with serology for hepatitis C and B viruses, human immunodeficiency virus, Leishmania and bone-marrow study (aspirated and cultured). All results were negative. The abdominal ultrasound examination ruled out visceromegaly and there was also no evidence of cutaneous lesions. As a result of all above, the diagnosis was primary laryngeal leishmaniasis. In view of these results and following the complete exeresis of the lesion, further medical treatment was ruled out.


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of the larynx, through inhalation of the mosquito. The lesions may be single or multiple and may adopt varying macroscopic morphologies similar to other kinds of lesions more commonplace in this area such as papillomas, granulomas, leukoplakias, erythroplasias or malignant epithelial neoplasias.

The diagnostic gold standard is a histological study with visualization of Leishmania inside the macrophages adopting the form of oval intracellular amastigotes (Leishmania donovani bacilli) with Giemsa or haematoxylin–eosin staining as well as excluding cutaneous and visceral leishmaniasis.

This variant has not shown any systemic repercussion in any of the cases described in the literature, presenting a speedy and total response to medical treatment and therefore with an excellent prognosis. This treatment comes in various alternatives: amphotericin B, meglumine antimoniate or even, in the case of very small, single lesions, complete extirpation may represent a cure, as in the case reported here.

In conclusion, when faced with laryngeal lesions with maintenance of mobility, once malignancy, papillomatosis and other specific granulomatous lesions have been ruled out, leishmaniasis must be taken into account in the differential diagnosis.

Conflict of Interest

The authors have no conflict of interests to declare.

References