

CASE REPORTS

Oral Involvement in Lymphomatoid Papulosis

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Abstract. Lymphomatoid papulosis is a cutaneous lymphoma with an indolent clinical behavior characterized by chronic development of recurrent, self-limited lesions appearing as necrotic papules and with a pathology compatible with T cell lymphoma. Mucosal involvement by lymphomatoid papulosis is very rare but has been reported in the literature. It usually appears as ulcers in patients previously diagnosed of lymphomatoid papulosis. From a histological perspective it is characterized by an infiltrate of CD 30 positive atypical lymphocytes together with a mixed inflammatory infiltrate of eosinophils, neutrophils, histiocytes and plasma cells. We report the case of a man previously diagnosed of lymphomatoid papulosis that developed two ulcerated lesions in the tongue whose biopsy confirmed the diagnosis of oral involvement by lymphomatoid papulosis.

Key words: lymphomatoid papulosis, cutaneous lymphoma, tongue, oral involvement.

AFECTACIÓN DE LA MUCOSA ORAL POR PAPULOSIS LINFOMATOIDE

Resumen. La papulosis linfomatoide es un linfoma cutáneo con un comportamiento clínico indolente, caracterizado por la aparición crónica en la piel de lesiones recurrentes, autolimitadas, en forma de pápulas necróticas y con una histopatología sugestiva de un linfoma de células T. La afectación mucosa por papulosis linfomatoide es un hecho extremadamente raro, pero que ya ha sido descrito en la literatura. Suele acontecer en pacientes con diagnóstico previo de papulosis linfomatoide, y se manifiesta en forma de úlceras. Desde el punto de vista histológico se caracteriza por un infiltrado de linfocitos atípicos CD 30 positivos, junto con un infiltrado inflamatorio mixto de eosinófilos, neutrófilos, histiocitos y células plasmáticas. Presentamos el caso de un varón con diagnóstico previo de papulosis linfomatoide que desarrolló dos lesiones ulcerosas en la lengua y cuya biopsia confirmó el diagnóstico de afectación de mucosa oral por papulosis linfomatoide.

Palabras clave: papulosis linfomatoide, linfoma cutáneo, lengua, afectación oral.

Introduction

According to the new World Health Organization–European Organization for Research and Treatment of Cancer classification, lymphomatoid papulosis is a T cell cutaneous lymphoma with indolent clinical behavior.¹ It tends to affect adults—45 years is the average age of onset—and it is manifest clinically by the recurrent appearance of

papulous, papulonecrotic, or nodular lesions on the skin, predominantly on the trunk and limbs.

Each individual lesion tends to disappear within a period of approximately 3 to 12 weeks. In more than 20% of patients lymphomatoid papulosis can precede, be associated with, or follow other types of lymphoma, generally mycosis fungoides or a Hodgkin lymphoma. Histopathological studies reveal 3 distinct patterns in lymphomatoid papulosis.^{1,2} Type A or the histiocytic type accounts for 80% of cases, and it is characterized by an infiltrate of abnormal, slightly epidermotropic, CD30+ lymphocytes, along with numerous inflammatory cells. Type B, also described as mycosis fungoides-like, represents 10% of the total and is characterized by an epidermotropic infiltrate of CD30- lymphocytes with cerebriform nuclei, similar to those observed in mycosis fungoides. Type C or anaplastic large cell lymphoma (10% of cases) is characterized by an

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abundant monomorphic dermal infiltrate of CD30+ lymphocytes.

We report the case of a man who was diagnosed with lymphomatoid papulosis 7 years ago and who developed ulcerous lesions on the tongue. Two biopsies were required to reach a diagnosis of oral involvement specifically related to lymphomatoid papulosis.

Case Description

A 67 year-old man, with no relevant case history, was regularly attending our clinic for lymphomatoid papulosis diagnosed 7 years ago. At the initial diagnosis, study of the extent of the lymphoma was normal. The patient had later developed several outbreaks of lesions which could be well controlled through the topical application of clobetasol, although he occasionally required oral metotrexate with a total cumulative dose of 350 mg for clinical control. In



Figure 1. Ulcerous lesion on the underside of the tongue.

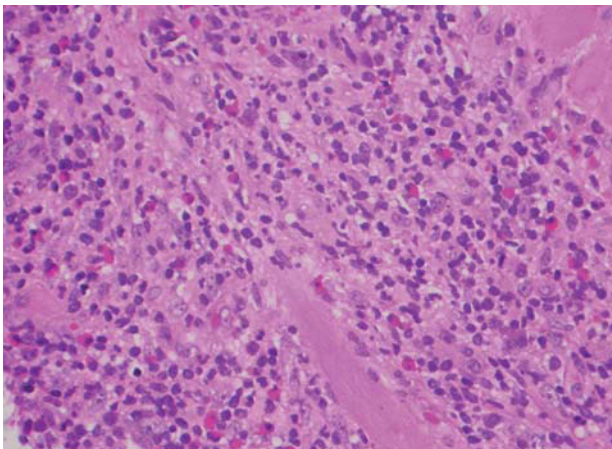


Figure 2. Infiltrate predominantly of lymphoid type cells (Hematoxylin-eosin, $\times 400$).

January 2005, the patient rapidly developed an ulcerous lesion on the tongue, hard to the touch, approximately 1.5 cm across, with a fibrinous and dirty base. This lesion was diagnosed as oral phagedenic ulcer, and 500 mg of ciprofloxacin every 12 hours was prescribed. The lesion showed no improvement after a week of treatment, and a biopsy was taken. The pathology report was compatible with an eosinophilic ulcer, so treatment with oral prednisone at 30 mg per day was prescribed with full resolution a few weeks later. Six months later the patient consulted with a new lightly infiltrated ulcer on the underside of the tongue (Figure 1), measuring 1.5 cm diameter, with inflamed edges and a whitish surface of a fibrinous appearance. At this point, with the suspicion that the lesions might be a symptom of the underlying process rather than a new eosinophilic ulcer, we decided to take another biopsy. The histopathological study showed ulceration of the mucosa, accompanied by diffuse infiltrate in the underlying dermis. This infiltrate showed a predominance of lymphoid-like cells, but of a greater size than mature lymphocytes, as well as a large number of centroblasts and immunoblasts, and even some cells of Reed-Sternberg type morphology. Several mitoses were also seen. Moreover, attention was drawn to the presence of abundant eosinophils in the infiltrate, with only a few neutrophils, histiocytes, and plasma cells (Figure 2). Immunohistochemical studies proved positive for CD30 in some of the abnormal lymphocytes. No study was made of T cell receptor rearrangement.

The result of the biopsy confirmed oral involvement by lymphomatoid papulosis, and we believe it probable that the same diagnosis can be applied to the first lesion suffered by the patient 6 months previously.

Discussion

Oral involvement in cases of lymphomatoid papulosis is a fairly rare occurrence, but it has been reported previously in the literature. The article published by Pujol et al³ is especially interesting on this front as it describes 2 new cases and reviews all the previously published literature. In total, the authors present 6 cases: 4 women and 2 men, with an average age of 46 years old.³⁻⁶ In every case, the oral involvement presented in the form of ulcers on the tongue, except for one, with involvement of the labial angles of the mouth and of the vulva.² All the patients had been previously diagnosed with lymphomatoid papulosis, except in one case in which diagnosis of oral involvement was made at the same time as cutaneous diagnosis of lymphomatoid papulosis.⁴ The lesions were all self-limiting and their appearance did not worsen the prognosis in any of the cases.

Differential diagnosis from other atypical oral lymphoid infiltrates can principally be established through comparison

with the cutaneous lymphoproliferative processes often observed in this location.³ Primary cutaneous CD8-positive epidermotropic cytotoxic T cell lymphomas is the first differential diagnosis to consider. This is cutaneous lymphoma with a very poor prognosis that is characterized by the generalized appearance of ulcerated cutaneous lesions and that frequently presents with oral involvement. From the histopathological point of view it is characterized by an infiltrate of CD8+ lymphocytes in the superficial dermis, with a band-like distribution, with marked epidermotropism. In contrast, in lymphomatoid papulosis the lymphocytes are not necessarily CD8+ or epidermotropic (except in the mycosis fungoides-like variant). Also, in clinical terms lymphomatoid papulosis lesions resolve spontaneously and prognosis is good, in contrast to cytotoxic T cell lymphoma.

Oral involvement with mycosis fungoides is very rare—less than 1 % of cases—and is generally associated with a worse prognosis. The histopathology of mycosis fungoides in oral lesions is similar to that for cutaneous lesions. The presence of typical mycosis fungoides lesions, and above all a negative result for CD30, are useful for ruling out lymphomatoid papulosis.

T γ/δ cell cutaneous lymphoma frequently affects the mucous membranes. Its histopathology shows a dermal infiltrate that can present both marked epidermotropism and subcutaneous affectation. It is composed of CD8+ cells, hindering differential diagnosis with epidermotropic primary cutaneous CD8+ T cell lymphoma, but not with lymphomatoid papulosis.

T/natural killer (NK) cell lymphoma can also affect the mucous membranes, but it would not be difficult to differentiate from lymphomatoid papulosis, as T/NK cell lymphoma lesions tend to be persistent, with frequent nasal involvement, and histopathological studies are positive for

NK cell antigens (CD2, CD56, and T-cell intracellular antigen-1).

In conclusion, we present a new case of oral involvement in lymphomatoid papulosis similar to those previously published. Oral involvement in lymphomatoid papulosis is a rare occurrence, but does not imply a worse prognosis. When presented with an ulcer—especially on the tongue—in a patient diagnosed with lymphomatoid papulosis, we must suspect specific oral involvement specific of lymphomatoid papulosis.

Conflicts of interest

The authors declare no conflicts of interest.

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