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Oral Lichen Planus Associated with Psychological States (Anxiety and Depression) - A Case Study

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Abstract

Oral Lichen Planus (OLP) is a chronic inflammatory dermatological disease of a relatively common autoimmune nature, yet of unknown etiology, which affects mostly women. Its clinical diagnosis is possible through the way it presents itself. However, the histopathological study is responsible for the laboratory diagnosis, which can exclude or not the possibility of dysplasia and/or neoplasia. Researches try to find an association between psychological states and OLP. Its potential for malignancy is not yet well understood. The treatment consists of topical and systemic corticosteroids. This study aims to report a clinical case of OLP associated with psychological states.

Keywords: Oral lichen planus; Odontology; Depression; Psychological states

Introduction

Lichen Planus is a chronic, autoimmune, inflammatory, and dermatological disease mediated by T-lymphocytes of unknown etiology affecting the stratified squamous epithelium [1]. The World Health Organization reports a high prevalence of OLP, and considers it an injury with potential for malignization, requiring close and rigorous attention [2]. Preferably, the regions of the oral mucosa and skin are the most involved, although it may affect locations, such as anogenital regions, esophagus, nails and scalp [3]. Regarding its involvement in oral cavity, OLP has its highest incidence in jugal mucosa and, consecutively, in tongue, palate, lip and buccal floor. The disease has six forms of clinical presentation, with differentiated characteristics and frequencies: reticular, ulcerated, atrophic, on plate, papular and the bullous type [4].

The English dermatologist Erasmus Wilson was responsible for the first report of the lesion in 1869, using the name lichen planus to correlate the "nervous tensions" with a pattern found in nature. Etymologically, the term is derived from two words found in Greek and Latin, respectively: lichen derives from "leichen", meaning "tree moss"; and plane, in its turn, derives from "planus", a Latin term meaning a smooth surface [5]. This definition was supplemented later by Louis Frédéric Wickham, in 1895, to add to the description of the term stries et punctuations grisatres (striae and dots grayed out), called later,Wickham's Striae, being considered a pathognomonic sign this finding of dermatosis [4].

In clinical routine, the lesions are more identified in the female population. In an epidemiological study, OLP was found in about 1.27% of the population in general, and the female population was the most affected one – about 61% of the total cases [6,7]. It is rare in children and among the elderly, there is no increase or decrease in correlations of incidences reported.

OLP is diagnosed through the patient's clinic suggestive, especially if it is present with bilateral distribution reticular form [8]. However, the biopsy fragment must be taken for histopathologic study to confirm the clinical diagnosis, excluding or confirming cases of dysplasia and neoplasia [9]. The OLP may not be present themselves clearly in all times of clinical examination, not infrequent overlapping signs of other clinics as leukoplakias, then with other dermatoses, oral diagnosis differential group to be analyzed by a professional, as well as lichenoid reactions, Erythematosus lupus and herpetic dermatitis [4].

Erosive OLP or atrophic that tends to affect gums has to be differentiated from Bullous, because both may present peeling of the affected region [10]. The OLP also resembles with the oral lichenoid reactions (RLOs), being necessary to perform a correct diagnosis [11]. Biopsy is mandatory for confirmation in the diagnostic protocol. It may be necessary to use other methods, such as direct immunofluorescence as well [4].

The professional's area of actuation is nebulous in this pathological process, considering that the approach to the patient with OLP is empirical due to the absence of sufficient scientific studies for the protocol of measures. The current standards of therapeutic management for OLP consist in reducing the symptoms, lesions of the oral mucosa, risk of malignization and maintaining good oral hygiene [5]. Preventively, the adoption of measures to control or to extinct exacerbator factors of injury, such as smoking, diabetes, and hypertension is valid [12]. New therapies have been useful to manage OLP, such as drug therapy with corticosteroids and systemic topics focused on symptom control (the most common method used), surgery and laser [13].

Some studies have been carried out to discover the association of OLP with psychological states, from lifestyle to medical history [14]. According to some research results, it has been proved that there is a strong correlation between OLP and psychological states, and it is important, in addition to the drug therapy to control the disease, that patients diagnosed with OLP are treated with psychological support

[15], since patients attending this orientation along with traditional therapy present significant improvements in the picture [16].

The aim of this study is to report a case of LPO associated with psychological states (anxiety and depression) as well as to highlight the influence of the familiarity of the professional in the clinical management of the disease.

Case Report

A 36-year-old female patient, leukoderma, complaining of a "white dot" in the tongue that has been getting bigger in the last year. She does not smoke, but she admits that she occasionally has alcoholic beverages. She also reports that she has been making use of lithium for two years to treat depression, bupropion for anxiety, pantoprazole for gastritis and diclofenac sodium for herniated disc. She denies intercurrences during dental treatments. In the physical examination, the patient presents white streaks with erythematous areas in jugal mucosa, bilateral, and white plaque on the back of tongue, left side, measuring approximately 4 cm and the other on the right-side measuring 5mm. She reports that she has been examined by several professionals with possible clinical diagnosis of OLP. The injuries had never been submitted to biopsy. The history has shown that pain, caused by the lesions, was the main symptom, although its beginning was not informed. A biopsy was performed on the right side of the tongue through incision and, on the left side through the excision of the mucosa. She was scheduled to return after 15 days. The patient returned for surgical review and analysis of her histopathological examination report, which detected oral lichen planus. As part of the therapy, the patient was oriented about her disease and Clobetasol propionate 0.05% + Nystatin 100,000 IU + Ad-Muc were prescribed. She was scheduled to return every 4 months for control (Figures 1-3).

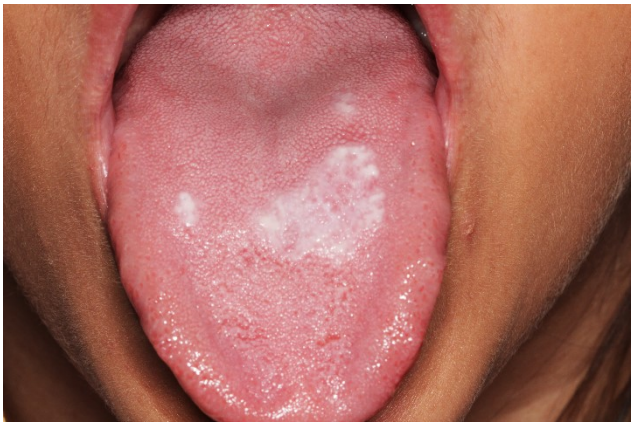

Figure 1: White dot on the tongue of Leukoderma patient.

Discussion

OLP is a chronic autoimmune disease that tends to affect the female population, which has been confirmed in this study [7]. In this case, the patient is a middle-aged woman. OLP is a disease characterized by an immuno-pathological response [17]. Although not fully justified, there are scientific suggestions affirming that stress is one of the triggering factors, which may have influenced the pathological process in this patient [14], considering that she is under treatment for anxiety and depression with prescribed medicines.

The shape of the lesion present in the patient is the most common one: the "classic" reticular [4], being present in both sides of the jugal mucosa and at the back of the tongue, places that are commonly affected [7]. Considering the characteristics of the disease, as well as signs, symptoms, and its shape, the clinical diagnosis might have been established [4] and, subsequently, was taken for histopathological study. To improve the patient's well-being during this period, Ad-Muc (external use) and chilled chamomile tea were prescribed [18].

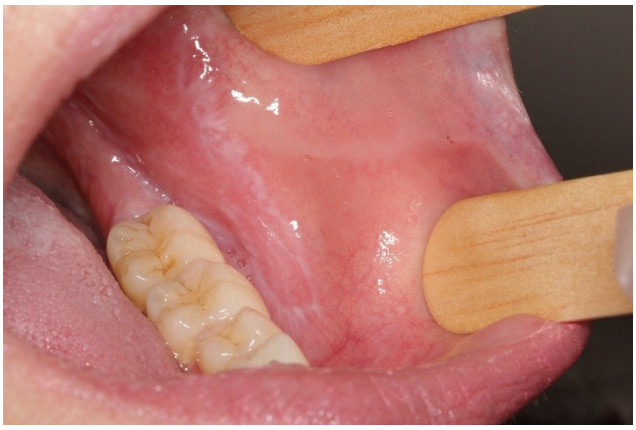

Figure 2: Patient presents white streaks with erythematous areas.

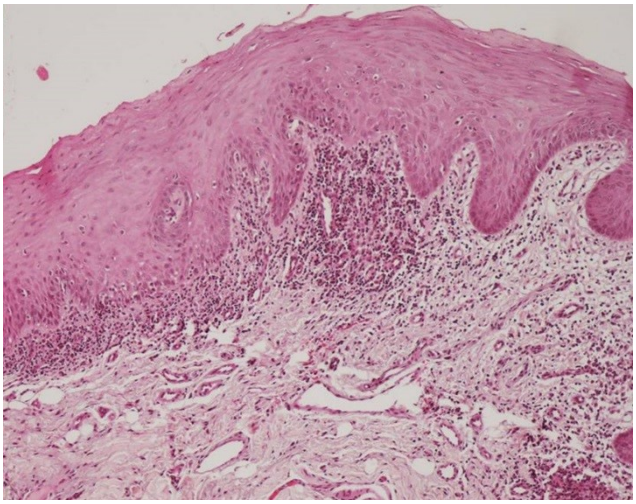

Figure 3: Histopathological study.

After the final result was received and asked about the disease, the patient asks for surgical removal of the lesions with laser, which is impossible because it is a chronic and autoimmune disease [1], whose appearance will be likely through the variations of her health conditions, it was explained to the patient. As therapeutic measure, she was oriented about the disease and prescribed Clobetasol propionate 0.05%, chemical compound of the Group of corticosteroids, 1668 Nystatin 100,000IU, since antifungal leverage clinical outcomes [19]. +

Ad-Muc [18], an efficient phytotherapic element to control the symptom of OLP.

Conclusion and Final Considerations

OLP is a relatively common illness in the clinical routine what it becomes perfect anamnese and important clinical examination. It is treated, most of the time, for not specific medicines of the buccal socket, showing that it has necessity of new studies for its therapeutical one. The role of the professional in the prevention is of great value, in view of eliminating completely or reducing the progression of the illness.

Studies have shown that the treatment, when multidisciplinary, involving psychological support therapy, has great significance in making easier the manifestation of OLP, once it has strong connection with psychological changes. However, it is our responsibility as professionals to know how to identify alterations, to diagnose it, to make the patient aware of the illness, to treat it adequately, and, when necessary, to address the patient to the specific area, increasing the possibilities of control of the illness.

Conflicts of Interest

There are no conflicts of interest for the present study.

References

1. Pindborg JJ, Reichart PA, Smith CJ, Van der Waal I (1997) WHO International Histological Classification of Tumors. Histological Typing of cancer and precancer of the oral mucosa.: Springer: Berlin.
2. Van der Meij EH, Van der Waal I (2003) Lack of clinicopathologic correlation in the diagnosis of oral lichen planus based on the presently available diagnostic criteria and suggestions for modifications. J Oral Pathol Med 32: 507-512.
3. Le Cleach L, Chosidow O (2012) Clinical practice Lichen Planus. N Engl J Med 366: 723-732.
4. Canto AM, Müller H, Freitas RR, Santos PS (2010) Oral lichen planus (OLP): Clinical and complementary diagnosis. An Bras Dermatol 85: 669-675.
5. Gupta S, Jawanda MK (2015) Oral lichen planus: An update on etiology, pathogenesis, clinical presentation, diagnosis and management. Indian J Dermatol 60: 222-229.
6. Carrozzo M (2008) Oral diseases associated with hepatitis C virus infection. Part 1. sialadenitis and salivary glands lymphoma. Oral Dis 14: 123-130.
7. Soares MSM, Honório APRC, Arnaud RR, Filho FDCO (2011) Oral conditions in patients with oral oral lichen. Pesq Bras Odontoped Clin Integr 11: 507-510.
8. Carrozzo M, Thorpe R (2009) Oral lichen planus: A review. Minerva Stomatol 58: 519-537.
9. Lodi G, Scully C, Carrozzo M, Griffiths M, Sugerman PB, et al. (2005) Current controversies in oral lichen planus: report of an international consensus meeting. Part 2. Clinical management and malignant transformation. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 100: 164-178.
10. Lavanya N, Jayanthi P, Rao UK, Ranganathan K (2011) Oral lichen planus: An update on pathogenesis and treatment. J Oral Maxillofac Pathol 15: 127-132.
11. Sugerman P, Savage NW, Walsh LJ, Zhao ZZ, Zhou XJ, et al. (2002) The pathogenesis of oral lichen planus. Crit Rev Oral Biol Med 13: 350-365.
12. Castells TE, Figueiredo BRP, Aytés BL, Escoda GC (2010) Clinical features of oral lichen planus. A retrospective study of 65 cases. Med Oral Patol Oral Cir Bucal 15: 685-690.
13. Sahebjamee M, Arbabi-Kalati F (2005) Management of oral lichen planus. Arch Iranian Med 8: 252–256.
14. Burkhart NW, Burker EJ, Burkes EJ, Wolfe L (1996) Assessing the characteristics of patients with oral lichen planus. JADA 127: 648-662.
15. Koray M, Dülger O, Ak G, Horasanli S, Üçok A, et al. (2003) The evaluation of anxiety and salivary cortisol levels in patients with oral lichen planus. Oral Dis 9: 298-301.
16. Justi MM (2009) Patients with OLP: Stress, coping and adaptative efficiency. Dissertation (Master's degree in Education and Psychology _ 1658 _ learning 0669) – São Paulo State University Julio de Mesquita Filho _ 1678 _ 0689 (UNESP), Bauru.
17. Ergun S, Troşala ŞC, Warnakulasuriya S, Özel S, Önal AE, et al. (2011) Evaluation of oxidative stress and antioxidant profile in patients with oral lichen planus. J Oral Pathol Med 40: 286-293.
18. Curra M, Martins MA, Lauxen IS, Pellicioli AC, Sant'Ana Filho M, et al. (2013) Effect of topical chamomile on immunohistochemical levels of IL-1β and TNF-α in 5-fluorouracil-induced oral mucositis in hamsters. Cancer Chemother Pharmacol 71: 293-299.
19. Regezi JA, Sciubba JJ (2000) Oral pathology: Clinical and pathological correlations. (3rd edn). Rio de Janeiro: Guanabara Koogan.