

Lichen Planus Lesions in Oral Cavity in Patients with AIDS and Coinfected with Hepatitis C Virus

Giovani EM, Souza RS, Camila Correia dos Santos*, Georgevich Neto R and Colloca M

Department of Dentistry, Brazil University, Brazil

Article Information

Received date: Jul 31, 2017

Accepted date: Aug 28, 2017

Published date: Sep 05, 2017

*Corresponding authors

Camila Correia dos Santos, São Paulo, SP, Brazil, Tel: +5511970236371; Fax: +551155864000; Email: businesska@hotmail.com

Distributed under Creative Commons CC-BY 4.0

Keywords Hepatitis C; Lichen plan; Oral manifestations; HIV / Aids

Article DOI 10.36876/smd.1017

Abstract

Lichen planus is a mucocutaneous, chronic inflammatory and very common dermatological disease. The importance of this disease is related to its frequency in the general population, its multiplicity of aspects, and its possible connection with malignancy. In the skin the lesions consist of reddish or white papules that can present a central depression. The buccal lesions are often multiple, bilateral, striated and appear as whitish plaques in the reticular form and exposing the connective tissue, in the erosive or atrophic form and rarely the bullous. Basal epithelial cells are the main target in lichen planus. The mechanism of basal cell damage is related to a cellular immunization process involving Langerhans cells, T lymphocytes and macrophages. Lichen planus is a middle-aged disease that affects men and women in almost the same proportion. Patients with Hepatitis C virus and HIV patients are also more likely to develop oral lichen planus due to adverse effects of their drug therapies, as well as the use of Interferon (IFN) alpha, Ribavirin, and Zidovudine (for patients HIV). Children are rarely affected. Frequently, the severity of the disease is parallel to the patient's degree of stress, and immunosuppression.

Introduction

Lichen planus is a chronic inflammatory muco-cutaneous disease with peculiar clinical and histopathological features, but its etiology and pathogenesis to the present moment remain practically obscure. Some hypotheses of its etiology are from immunological, viral considered as a function of findings of inclusion bodies in electron microscopy, genetic predisposition, psychogenic, and neurological alterations. In 1989, Choo et al. [1] reported that with the advent of Hepatitis C, chronic liver diseases of varied etiologies began to be investigated as possible etiologic factors of lichen planus, and this occurred suggests an important relation between lichen planus and the causes of chronic liver disease and should be very well investigated, but a possible etiological role of hepatotropic viruses such as Hepatitis C Virus (HCV), which is an RNA virus, has been attributed. Around 200 million people worldwide are estimated to be infected with this virus. Approximately 3.5 million people in Brazil are considered as one of the major public health problems [2]. After the individual is exposed to the hepatitis C virus, he becomes infected in an incubation period ranging from 1 to 5 months. In the adult subjects in general 30% to 40% with acute HCV infection present mild constitutional symptoms, predominantly fever, malaise, fatigue, nausea, vomiting and mild abdominal pain. Chronic HCV hepatitis is asymptomatic, and any clinical manifestations will appear in more advanced stages of the disease, which determines that it is a hidden, silent disease with very severe negative outcomes. The diagnosis is most often made through blood tests usually ordered for other purposes and individuals at increased risk of contamination are those who received blood transfusion or blood products (parenteral) before 1993, intravenous drug users, and hemophiliacs, Wearers of piercing, tattooing, and individuals presenting other forms of percutaneous exposure. Individuals with multiple partners have the risks of exacerbated contamination. For laboratory diagnosis of hepatitis C, anti-HCV positive patients undergo a qualitative Polymerase Chain Reaction (PCR) test: of these, 25% are negative, being considered cases cured and the remaining 75% positive are submitted to disease investigation Hepatic transaminase levels and, if elevated, hepatic biopsy is indicated. Cases with moderate and severe hepatopathy should be tested for C virus genotyping to define prognosis and therapeutic orientation. Interferon and ribavirin are mainly used for the treatment of hepatitis C.

Clinical Case Reports

Clinical case 1

Male, Caucasian, 27 years old, male with MSM, HIV and HCV positive diagnosed in 2011, at that time TCD4 = 433 cells / mm³ of blood, and Viral Load (VL) undetectable. The patient sought the Center for Studies and Assistance to Special Patients of the Paulista University for dental treatment. He also reports that he came in search of teeth treatment and a wound (according to

OPEN ACCESS

ISSN: 2575-7776



Figure 1: Leukoerythematous lesion in jugal mucosa, mixed characteristics of reticular form (Wickham Striae) to erosive.

patient information) in the mouth that was very uncomfortable. In the intra oral clinical examination we observed a lesion on the left side of the jugal mucosa (Figure 1), with erosive erythematous features, superimposed by a thin non-removable scraped film extending to the region of retrocomissure, whitish lesion with clinical characteristics of the Wickham striae. Patient reports pain when eating, exacerbating with spicy foods. Patient makes use of HAART and interferon. It was performed in the erosive / erythematous region incisional biopsy and the material was processed laboratory, and evidenced compatible with lesion of lichen planus. The proposed treatment was Elixir dexamethasone mouthwashes, 3 times a day, mouthwashes that were performed for 10 minutes at a time, for 2 weeks. Already on the eighth day of treatment, we observed complete remission of the ulcerated manifestation, remaining only the whitish streaks. Patient also reported disappearance of all symptomatology, patient is undergoing preservation at 2 years.

Clinical case 2

Male patient, Caucasian, 33 years old, UID (User of Inject able Drugs) and HET (heterosexual), in AIDS and diagnosed with positive HCV. He was diagnosed to be HIV and hepatitis C in 2013. At the time of anamnesis he presented results of TCD4 = 95 cells / mm³ of

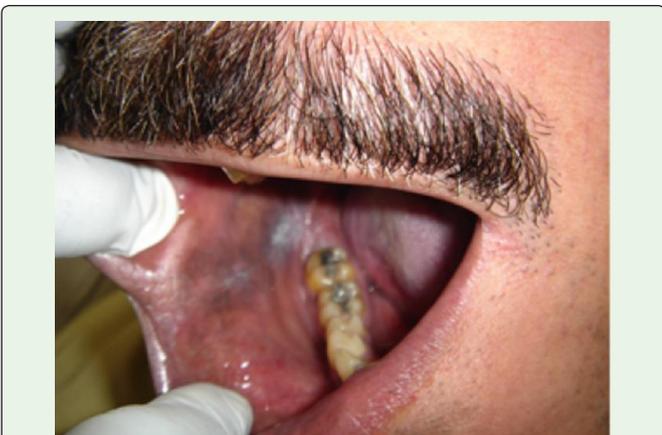


Figure 2: Leukoderma lesion in jugal mucosa evidencing the reticular form (Wickham Striae) Discussion.

blood, VL 55,000 copies per mm³ blood. Make use of HAART. He sought CEAPE UNIP for dental treatment. At the intra-oral clinical examination we observed in the region of jugal mucosa extending to the retro commissure, a whitish film overlapping a brownish / purplish bed at the bottom (Figure 2). This whitish film is not removable by scraping and evidencing the clinical characteristics of Wickham Striae compatible with oral manifestations of reticular lichen planus. Symptomatology manifestations were not presented. Patient still reported being very anxious and depressive, suggesting situations that associated with the pathologies, to be indicative and to facilitate the development of oral manifestations of lichen planus. The patient continues to be preserved.

Discussion

Lichen planus is a chronic inflammatory mucocutaneous disease with peculiar clinical and histopathological characteristics, and its etiology and pathogenesis to the present moment remain obscure. Some etiological hypotheses are of immunological or viral alterations considered as a function of findings of inclusion bodies in electron microscopy, genetic predisposition, psychogenic and neurological alterations. Hepatitis C causes in some infected a greater dehydration of the organism, consequently affecting the skin and mucosa which causes dermatological problems. Medications for the treatment of hepatitis C increase the dermatological problems [3].

The dermatological manifestations that are most often associated with hepatitis C are cryoglobulinemia (vascular disease that causes joint pain), porphyria cutanea tarda (appears in areas exposed to the sun of the skin, such as hands and face emerge blisters), livedo reticularis (Vascular disease characterized by purple spots on the skin), leukocytoclastic vasculitis (vasculitis and erythema nodosum), erythema acral (a relatively frequent skin reaction produced by different drugs, often appearing in patients undergoing cancer chemotherapy) [4]. The manifestations that may be associated with hepatitis C are lichen planus (a disease that affects the mucosa and skin and has a chronic inflammatory nature), as well as Sjögren’s syndrome (an autoimmune disease that reduces the production of tears and saliva). It is also noted pruritus (itching), urticaria (rash, skin becomes red), polyarteritis nodosa (inflammation of the arteries). HCV infection only began to be considered a possible etiologic agent of lichen planus when HCV serologies became available in 1990 [5]. Numerous researches has suggested that cutaneous and mucosal lesions may be caused by the direct action of the virus or by an induced immune response, especially when erosive oral lesions are present, but there appears to be wide variation in international scientific data regarding the prevalence of hepatitis C In patients with lichen planus [1,2]. The numbers found in relation to the prevalence of hepatitis C and oral manifestations of lichen planus vary, suggesting that HCV may be involved in the development of dermatosis, especially of the oral subtype [6,7]. At the same time, a low prevalence of HCV infection in patients with lichen planus has been found in some studies conducted worldwide and this discrepancy can be justified by the variability of the prevalence of hepatitis C in the world population, which varies from 0, 3% and 1.5%, depending on the country surveyed [8,9]. Brazil is an intercontinental country of immense territorial proportions where difficulties and divergences occur regarding the diagnosis and management of these patients. Research suggests that the higher prevalence of C virus in some regions may interfere with the results of the studies, i.e., studies in countries with a higher prevalence of

HCV will find a significant association between lichen planus and hepatitis C. As already explained, there are studies that demonstrate a significant causal relationship between HCV and lichen planus, and others whose results go against this hypothesis. Several authors have developed epidemiological studies involving different population groups to clarify the existence of such a relational character, some confirm the relation between both and others contradict this relation [6-9].

Conclusions

- The epidemiological profile of oral lesions of lichen planus has been changing in recent years, including young men and men with Hepatitis C virus and HIV co infection.
- There is an increase in oral manifestations of lichen planus in the erosive form and / or in the mixed form, which hitherto pre-dominated the reticular form evidenced clinically by the Wickham Striae.
- Medicinal therapy used as a protocol in the treatment of patients with Hepatitis C (Ribavirin, Pegylated Interferon), characterize as important modifying factors, exacerbating oral manifestations of lichen planus.
- Two important therapeutic measures that do not cause adverse effects are the use of Dexamethasone® Elixir, used to perform mouthwash for 5 minutes 4 times a day, and another important option is the application of low power intensity laser applied Punctual on the affected area, it has been shown effective and recommended in the control mainly of the painful symptomatology when there is.

References

1. Canto AM, Muller H, Freitas RR, Santos PSS. Oral lichen planus (OLP): clinical and complementary diagnosis. *Anais Brasileiros de Dermatologia*. 2010; 85: 669-675.
2. WOO SB Atlas de patologia oral. 1. ed. - Rio de Janeiro : Elsevier, 2013.
3. Choo QL, Kuo G, Weiner AJ, Overby LR, Bradley DW, Houghton M. Isolation of a cDNA clone derived from a blood-borne non-A, non-B viral hepatitis genome. *Science*. 1989; 244: 359-362.
4. Morgado-Carrasco D, Fustà-Novell X, Podlipnik S, Giavedoni P. RF -Are the New Direct-Acting Antiviral Agents Effective for Treating the Cutaneous Manifestations of Hepatitis C? *Actas Dermosifiliogr*. 2017; 108: 365-366.
5. Nico MMS, Fernandes JD, Lourenço SV. Líquen plano oral. *An. Bras. Dermatol*. 2001; 86.
6. Neville BW, Damm DD, Allen CM, Bouquot. *JE Patologia Oral e Maxilofacial*. Trad.4a Ed., Rio de Janeiro. Elsevier, 2016; 972.
7. Regezi JÁ, Sciuba JJ, Jordan RCK. *Patologia Oral: Correlações Clinicopatológicas*. (6th Edn.). 2013. Elsevier, USA.
8. Sayiner M, Golabi P, Farhat F, Younossi ZM. Dermatologic Manifestations of Chronic Hepatitis C Infection. *Clin Liver Dis*. 2017; 21: 555-564.
9. Garcovich S, Garcovich M, Capizzi R, Gasbarrini A, Zocco MA. Cutaneous manifestations of hepatitis C in the era of new antiviral agents. *World J Hepatol*. 2015; 7: 2740-2748.