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Oral manifestation of atypical chronic herpes in immunocompromised patients: Case report

Abstract:

The infection is caused by the herpes simplex virus (HSV) represents one of the most common infections in the orofacial region, and may present in the primary, recurrent forms or more rarely in the chronic form. Due to the high prevalence of HSV in the general population, this infection is frequently present in immunosuppressed patients, such as opportunistic or co-infected patients. In immunocompromised patients oral lesions may appear as progressive enlargement ulcers, or in unusual forms, such as white-yellow plaques involving extensive areas of the lower lip and oral mucosa. Objective: To report a case of patient immunocompromised, with intra-oral yellowish-white lesion on the midline of the tongue was asymptomatic. Case report: Female patient has a history of HIV positive, with abandonment antiretroviral therapy (ART), and pulmonary tuberculosis. The intraoral physical examination revealed yellowish-white lesion on the midline of the tongue, emitting lateral projections with circinate and serpinous borders, with well defined transition area with normal mucosa. Areas of erosion/ulceration at the center of the lesion projections could be observed. The surface was not removable by scraping, and the lesion was asymptomatic. The immuno-histochemical study confirmed that it is a chronic HSV lesion and the patient is still on tuberculosis treatment and ART is reintroduced. Conclusion: The importance of the dental surgeon inserted in the multidisciplinary hospital team, helping the early diagnosis of oral manifestations and efficiency in involution of the clinical picture of the immunosuppressed patient.

Keywords: Herpes simplex; diagnosis; Oral Health; HIV Infections

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INTRODUCTION

Herpes simplex virus (HSV) infections are classically divided into a primary and a recurrent form. The primary episode occurs in patients without prior immunity to the virus and causes both local lesions and systemic manifestations. Recurrent HSV infections result from reactivation of HSV latent in nerve tissue of patients with prior immunity and cause only a cluster of local lesions without systemic manifestations¹.

The increased use of immunosuppressive drugs in cases of organ transplantation and in cancer chemotherapy, severe chronic HSV lesions. These chronic HSV lesions have a different clinical appearance than either the primary or the recurrent form and may have serious sequelae if left. Herpes virus cause a primary infection when the person initially contacts the virus, and it remains latent within the nuclei of specific cells during the individual's whole life. HSV is one of the most common human pathogens, the virus being mainly transmitted by direct contact².

Although HSV-1 is mainly associated with orofacial lesions and HSV-2 with genital herpes, an increasing incidence of HSV-1 genital herpes has been observed over the last years. HSV-1 and HSV-2 are the two major types of herpes viruses known to cause most common oral and perioral infections³. HSV-1 reactivation is more common in immunocompromised individuals and may result in viral shedding in saliva.

Patients with immunodeficiencies or treatment-related immunosuppression are at increased risk of developing severe generalized or prolonged HSV excretion⁴. Initial HSV infection is usually asymptomatic or mild and self-limited, but instead of disappearing from the body during convalescence, the virus establishes a latent infection that persists for life. Rarely, there is severe, often fatal, visceral dissemination⁵.

In immunocompromised patients, recurrent HSV-1 infection may be "atypical", more extensive and / or aggressive than that of immunocompetent individuals, slow healing and extremely painful. Although the exact frequency and severity of recurrent HSV-1 infection in HIV disease remain controversial, HSV-1 seropositivity is a predictor risk of recurrent HSV-1 infection in HIV disease⁶.

CASE REPORT

Female patient, 46 years old, admitted to a State Public Health Hospital in São Paulo, complaining of progressive weakness for 6 months, inappetence, productive cough with yellowish expectoration, dysphagia, dysuria, mental confusion and tongue injury. The patient was HIV positive, having abandoned both antirretroviral therapy (ART) and pulmonar tuberculosis treatment. The intra-oral physical examination revealed yellowish—white lesion on the midline of the tongue, emitting lateral projections with circinate and serpinous borders, with well-defined transition area with normal mucosa. Areas of erosion / ulceration at the center of the lesion projections could be observed.

The surface was not removable by scraping, and there were no further symptoms (Fig. 1). On the basis of a diagnostic hypothesis of chronic herpes, the patient underwent incisional biopsy to investigate HSV by immuno-histochemical study (IH) (Figs. 2 and 3). Serologies for infectious diseases were negative, and the CD4 count was 17 and viral load was 767,196. CT scans of the chest and positive PCR for mycobacterium tuberculosis confirmed a diagnosis of tuberculosis. With the presumptive clinical diagnosis of HSV, before the biopsy result, acyclovir therapy was started 200 mg intravenously 8 x 8 hours. Partial remission of lesion acyclovir been observed in Day 8 and total remission in Day 14. The IH confirmed that it is a chronic HSV lesion and the patient is still on tuberculosis treatment and ART is reintroduced (Figs. 4 and 5).



Figure 1. Yellowish-white lesion on the midline of the tongue, emitting lateral projections with circinate and serpinous borders.



Figure 2. Partial remission.



Figure 3. D14 total remission.

DISCUSSION

The chronic HSV lesions have a different clinical appearance than either the primary or the recurrent form and may have serious sequelae if

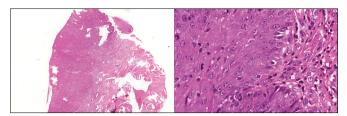


Figure 4. A. Photograph histological section tongue showing thickening of epithelium with submucosal edema (H & E 100X) B - H &E 400x.

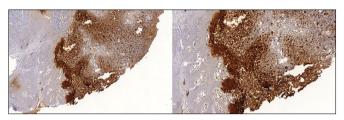


Figure 5. A. Photograph immunohistochemical panel (200x) confirmed that it is a chronic HSV lesion B. Photograph immunohistochemical panel (400x).

left3. Immunosuppressed patients have a defect in cell-mediated immunity that leads to a decline in the immune response to HSV and may lead to an atypical clinical presentation of this common skin condition. We reported a case of the yellowish-white lesion on the midline of the tongue the HSV in immunosuppressed patient.

In this case report was administered acyclovir intravenously before multiprofessional agreement about diagnostic hypothesis, acyclovir therapy was started 200 mg intravenously 8 x 8 hours, with total remission after fourteen days. Immunosuppressed patients with HSV infection generally respond well to acyclovir administered orally or intravenously³.

The HSV lesions in imunossuprimed patients have the potential to disseminate and cause generalized infection therefore, at first it is imperative for clinicians to rule out HSV as a cause of oral vesicles or ulcers³. It is considered the important action of the multiprofessional team the presumptive clinical diagnosis of HSV, with early solution the case reported.

REFERENCES

- 1. Cohen SG, Greenberg MS. Chronic oral herpes simplex virus infection in immunocompromised patients. Oral Surg Oral Med Oral Pathol. 1985;59:465-71.
- 2. Andrei G, Snoeck R. Herpes simplex virus drug-resistance: new mutations and insights. Curr Opin Infect Dis. 2013;26:551-60.
- 3. Balasubramaniam R, Kuperstein AS, Stoopler ET. Update on oral herpes virus infections. Dent Clin North Am. 2014;58:265-80.

- 4. da Silva AP, de Oliveira Lopes A, Vieira YR, de Almeida AJ, Sion FS, Grinsztejn B, et al. Genotypic Characterization of Herpes Simplex Virus Type 1 Isolates in Immunocompromised Patients in Rio de Janeiro, Brazil. PLoS One. 2015;10:e0136825.
- 5. Herget GW, Riede UN, Schmitt-Gräff A, Lübbert M, Neumann-Haefelin D, Köhler G. Generalized herpes simplex virus infection in an immunocompromised patient--report of a case and review of the literature. Pathol Res Pract. 2005;201:123-9.
- Arduino PG, Porter SR. Herpes Simplex Virus Type 1 infection: overview on relevant clinico-pathological features. J Oral Pathol Med. 2007;37:107-21. DOI: 10.1111/j.1600-0714.2007.00586.x
- Mukai MM, Giostri IF, Coelho MS, Fillus Neto J, Moritz S. Apresentação atípica de infecção por herpes simples em um paciente imunossuprimido. J Bras Patol Med Lab. 2005;41:79-82.