

ORAL HAIRY LEUKOPLAKIA: a case report and a review of literature

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Recebido em: 08/06/2016 - Aprovado em: 09/01/2017 - Disponibilizado em: 01/07/2017

RESUMO:

Leucoplasia pilosa oral (LPO) é uma doença associada com o vírus de Epstein-Barr e infecções pelo vírus da imunodeficiência humana (HIV). LPO é geralmente uma lesão assintomática e aparece como uma placa branca na borda lateral da língua, com superfície plana, ondulada ou com presença de pêlos, o que não é destacável quando raspado. Em alguns casos, o tratamento é recomendado para restabelecer as características normais da língua, para eliminar microorganismos patogênicos, proporcionando conforto ao paciente e por razões estéticas. O presente relatório descreve um LPO unilateral em um paciente do sexo masculino de 45 anos de idade, afetado pelo HIV. Depois da ausência de resposta ao tratamento antifúngico com fluconazol, 50 mg / dia durante 7 dias, a citologia exfoliativa foi realizada para confirmar o diagnóstico. Com estes resultados e correlação com as características clínicas das lesões e testes sorológicos (HIV positivo), o diagnóstico final foi LPO. O artigo também resume o estado atual do conhecimento sobre a patogênese da LPO, sua relação com o vírus Epstein-Barr, e as opções de tratamento.

PALAVRAS-CHAVE: AIDS. Infecção por HIV. Leucoplasia pilosa oral. Vírus de Epstein Barr.

ABSTRACT:

Oral hairy leukoplakia (OHL) is a disease associated with Epstein-Barr virus and human immunodeficiency virus (HIV) infections. OHL is usually an asymptomatic lesion, and appears as a white plaque on the lateral border of the tongue, with flat, corrugated or hairy surface, which is not detachable when scraped. In some cases treatment is recommended to reestablish the normal characteristics of the tongue, to eliminate pathogenic microorganisms, to improve patient comfort and for cosmetic reasons. The present report describes an unilateral OHL in a 45 -year-old male patient affected by HIV. After a lack of response to the antifungal treatment with fluconazole, 50 mg/day for 7 days, the exfoliative cytology was taken to confirm the diagnosis. With these findings and correlation with lesion clinical features and serological tests (HIV positive), the final diagnosis was OHL. The article also summarizes the current state of knowledge about the pathogenesis of OHL, its relation to the Epstein-Barr virus, and the treatment options.

KEYWORDS: AIDS. HIV infection. Oral Hairy leukoplakia. Epstein-Barr virus.

Abbreviations:

OHL: Oral hairy leukoplakia; **HIV:** human immunodeficiency virus; **AIDS:** acquired immunodeficiency syndrome.

INTRODUCTION

Oral hairy leukoplakia (OHL) is a disease associated with the infection of the oral epithelium by Epstein-Barr virus, while typically associated with HIV infection and immunosuppression, is rarely seen in HIV negative immunocompetent individuals. (Galvin AND Healy, 2014; MOURA et al., 2006). Diagnosis of OHL is based on clinical appearance and exfoliative cytology or biopsy, by electron microscopy, in situ hybridization, immunohistochemistry, and polymerase chain reaction techniques could be performed. Exfoliative cytology is a good option for the diagnosis of OHL, for being a simple, reliable, safe, noninvasive and non-traumatic method. (MOURA et al., 2010a, MOURA et al., 2010b, MOURA et al., 2007).

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In some cases treatment is recommended to reestablish the normal characteristics of the tongue, to eliminate possible niches for pathogenic microorganisms, to improve patient comfort and for cosmetic reasons. (MOURA et al., 2010a, MOURA et al., 2010b, MOURA et al., 2007). The treatments proposed in the

literature for OHL include surgery, viral systemic therapy and topical therapy MOURA ET AL., 2010b, MOURA et al., 2007; Gowdey 1995; Louzada-Nur and Costa, 1992; Sanchez, 1992; Hersbst, 1989; Bhandarkaret al, 2008; Newman et al., 1987).

CASE PRESENTATION

An 45-years-old male patient came to the Orestes Diniz Center for Training and Reference in Infectious and Parasitic Diseases, Belo Horizonte, Minas Gerais, Brazil for general dental care. According to the medical records, the diagnosis for HIV-infection had already been established during the period of the initial exam. So, the patient had first diagnosed with HIV-infection by enzyme-linked immunosorbant assay (ELISA) as a primary detection test and then by Western blot as a confirmatory test. The informed consent was obtained. Extra and intra-oral examination were in accordance with World Health Organization standards (WHO, 1997). The diagnosis of OHL was in accordance with International Classification Systems (ICD-10, 1989). Clinical features of his unilateral OHL included a white plaque, which was not removable when scraped, poorly demarcated and presented a flat, corrugated or hairy surface, located on the lateral border of tongue. The patient was submitted to antifungal treatment (fluconazole, 50 mg/day for 7 days) and OHL

was considered because there was a lack of response to the antifungal treatment. After that, exfoliative cytology was taken to confirm the diagnosis of OHL. The features of the exfoliative cytology to the diagnosis of OHL was in accordance with Kratochvilet al. (19), Fraga-Fernandes and Vicandi-Plaza (20), Migliorati et al. (21) and Epstein et al. (22). Analysis of the exfoliative cytology was performed in the Oral Pathology Service at the School of Dentistry, Universidade Federal de Minas Gerais. The treatment was not performed because the patient had no complaints aesthetics and the lesion was asymptomatic.



Figure: Oral hairy leukoplakia

DISCUSSION

Oral hairy leukoplakia (OHL) is related to the infection of the oral epithelium by the Epstein-Barr virus (EBV). The mechanism by which HIV may cause an increase in the incidence of OHL is poorly understood. The fact that this lesion is

primarily and almost exclusively observed in HIV-positive patients with low CD4 T cell counts suggests that it is directly associated with T-cell immunosuppression.

In this study, oral candidiasis and prior use of antifungal drugs helped to confirm the diagnosis of OHL. The high incidence of oral candidiasis in HIVpositive patients has resulted in the use of systemic antifungal drugs, especially fluconazole. The literature supports the recommendation that systemically applied antifungal drugs were prescribed as secondary prophylaxis against oral candidiasis or other systemic fungal diseases. SHIP et al, 2007. The fact this patients had presented very low CD4 counts may represent a key contributing factor, given that their poor immune system most likely allowed EBV to replicate, thus causing OHL, and may have been indirectly responsible for a decrease in the clinical healing of OHL. MOURA et al.,2006.

CONCLUSION

OHL is rare in immunocompetent individuals, particularly those who are HIV positive, EBV productive infection of the oral epithelium will result in oral hairy leukoplakia, perhaps environmental factors may play a role in the pathogenesis of oral hairy leukoplakia. In spite of OHL patients need dental care and require extreme

professional knowledge; The dentist should prepare to recognize the oral needs of these patients to assist them in early diagnosis by providing prevention and rehabilitation procedures. The knowledge about care and treatment described in this article provides safety for dentists to provide effective dental treatment and adequate prevention of oral lesions since they are more frequent in HIV positive.

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