

Uncommon Presentation of Primary Oral Syphilis: Multiple Herpetiform Chancres in HIV-Negative Patient

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Abstract: *Primary Syphilis is characterized by the development of a painless chancre at the site of inoculation associated with a satellite lymphadenopathy. Multiple syphilis chancres (MSC) occur most frequently in HIV patients. This article describes a rare case of a young male HIV negative patient with multiple herpetiform syphilitic chancres (MHSC) on his lower lip. The aim of this case report was to emphasize the features of atypical presentation of primary syphilis and to report, for our knowledge, the first case of MHSC of the oral cavity reported in the literature.*

Keywords: Syphilis, multiple chancres, oral cavity

1. Introduction

Syphilis is a sexually transmitted disease caused by the bacterium *Treponema pallidum*. The incubation period ranges from 3 to 90 days. The clinical manifestations of syphilis are rare and highly variable in appearance, with a broad spectrum of clinical aspects, so it is considered the "great imitator" of various diseases of the skin and mucosa (1). Changes in clinical manifestations of syphilis have been associated with treatment with antibiotics, metronidazole or other chemotherapeutic agent for intercurrent diseases; chronic alcoholism; changes in individual immunologic immunore activity by intoxication or infection (AIDS) and the elderly age (1-4).

Primary syphilis is initiated when the *Treponema pallidum* penetrates the skin or mucosa resulting in a chancre at the site of inoculation. The typical syphilitic chancre is a painless beefy red erosion usually indurated, and not purulent associated with regional lymphadenopathy (satellite lymphadenopathy). Multiple syphilitic chancres (MSC) are uncommon and HIV co-infection increase the likelihood of multiple chancre formation (70% versus 30% in HIV-negative patients) (2).

We report in this paper a case of multiple herpetiform syphilitic chancres (MHSC) in a HIV negative patient with a history of unprotected orogenital sex. The aim of this case report was to emphasize the features of atypical presentation of primary syphilis and to report, for our knowledge, the first case of MHSC of the oral cavity reported in the literature.

2. Case Report

A 25-year-old male patient presented for consultation at the Oral Medicine Department of the School of Dentistry, Del Salvador University/Argentine Dental Association, with a history of recurrent herpes labialis and reporting the presence of viral lesions in his lower lip. The patient reported lesions of 20 days evolution. Despite treatment with Acyclovir 800mg, 4 times a day for 7 days and

having placed a 0.05% betamethasone cream 4 times daily for 5 days the lesions did not heal.

Examination of the oral cavity revealed the presence of three painless beefy red erosions with regular contours and indurated to touch in the semi-mucosa of the lower lip (Fig. 1- Fig.2). No oral mucosa lesions were observed. Physical examination showed multiple small submandibular lymphadenopathy on the left side and a larger lymphadenopathy on the right side of upper neck.



Figure 1: Multiple erosions (chancres) with well-demarcated regular contours



Figure 2: Clean-based beefy red erosions

Based on the oral lesions of the lower labial semi-mucosa and associated lymphadenopathy, presumptive diagnosis of recurrent oral herpes was established and primary syphilis as a differential diagnosis. In order to reach definitive diagnosis, the following diagnostic tests were indicated: anti HSV 1-2 IgG antibodies, VDRL, FTA-

ABS, p24 and antibodies to HIV 1-2. Results of diagnostic tests were consistent with primary syphilis (treponemal test 7.65 s/co; positive FTA-ABS, p24 and HIV 1-2 antibodies were negative).

The patient was referred to infectiology for treatment. Clinical follow-up, 10 days after initiation of treatment (a single intramuscular injection of 2.4 million units of long acting benzathinepenicillin G) showed complete remission of lesions of the oral semi-mucosa.

3. Discussion

Oral primary syphilis is infrequent and is initiated when the *Treponema pallidum* penetrates the oral mucosa producing a typical single lesion at the inoculation site called chancre (2, 6, 7). This case can be considered extraordinary for several reasons: primary syphilis presented with three painless erosions (chancres) that were very similar to herpes simplex lesions; although the patient reported a history of herpes simplex virus infection, lesions did not remit with antiviral treatment and are rarely accompanied by regional lymphadenopathy with the features described. On the other hand, multiple syphilitic chancres are uncommon and they occur most often in individuals with HIV infection (2, 8) and as we mentioned above the patient was HIV negative.

This atypical clinical presentation emphasizes the importance of knowing that oral lesions may be the first manifestation of this sexually transmitted disease (STD). In this context and considering that the prevalence of syphilis is increasing around the world (9), it is important that health professionals are aware that Syphilis is an STD which has not been eradicated and it should be considered as a possible diagnosis of lesions seating in the soft tissue of the oral cavity.

4. Conclusion

The present study is the first to report the presence of multiple herpetiform oral syphilitic chancres in the semi-mucosa of HIV negative patient. This atypical presentation should alert health professionals about the importance of considering primary syphilis in the differential diagnosis of erosive lesions affecting the oral mucosa in an attempt to establish an early and accurate diagnosis and treatment of the disease.

5. Conflict of interest

The authors declare no conflicts of interest.

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