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Syphilitic Chancres of the Mouth: Three Cases

Stefano Ramoni, Marco Cusini, Francesca Gaiani and Carlo Crosti

Dipartimento di Anestesiologia, Terapia Intensiva e Scienze Dermatologiche, Università Deggi Studi di Milano – Fondazione IRCCS Ospedale Maggiore Policlinico, Mangiagalli e Regina Elena, Via Pace 9, IT-20122 Milano, Italy. E-mail: stefano.ramoni@gmail.com

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Sir;

Primary syphilis is characterized by a chancre appearing between 10 and 90 days after infection (1). Syphilitic chancre is a solitary, painless, indurated, reddish ulcer, accompanied by regional lymphadenopathy (1), which is localized at the site of *Treponema pallidum* (TP) inoculation and usually resolves after approximately one month (1). It is commonly found in the genital area, but at least 5% of syphilitic chancres are extragenital, mainly involving the oral mucosa and anus (2–4). We report here three cases of oral syphilitic chancres observed at our department during 2007 in three patients with a history of unprotected orogenital sex.

CASE REPORTS

Case 1

A 37-year-old heterosexual man presented with a 2-week history of a painless, indurated ulcerative lesion of the oral mucosa. Examination of the oral cavity revealed a single reddish ulcer on the left vestibular fornix (Fig. 1a); submandibular adenopathy was appreciable. General examination did not reveal any other skin and/or genital lesion. The patient reported unprotected receptive orogenital contact with different partners in the previous 3 months. The suspicion of primary syphilis was confirmed by the demonstration of TP in the lesion using a nucleic acid amplification test (NAAT) (5) and by specific serology: TP particle agglutination assay (TPPA) was positive at a titre of 1:80 and VDRL was positive at a titre of 1:8.

Case 2

A 45-year-old bisexual man presented at our department for the new occurrence of an asymptomatic ulcerative lesion

over the anterior two-thirds of the tongue (Fig. 1b). Clinical examination revealed a single ulcerated nodule, which was hard in consistency, with submental and submandibular lymphadenopathy. No other cutaneous or mucous lesion was appreciable. The patient reported a history of unprotected orogenital contact. TPPA was reactive at a titre of 1:80 and VDRL at a titre of 1:32. An ulcer swab tested with NAAT for TP was positive. A diagnosis of extragenital syphilitic chancre was made.

Case 3

A 28-year-old bisexual man with a history of unprotected orogenital contact with different partners came to our department for the presence of an asymptomatic ulcerative lesion over the tongue (Fig. 1c). Clinical examination revealed an isolated indurated reddish chancre, with laterocervical lymphadenopathy. No other lesions were present. The clinical features and history suggested the possibility of an extragenital syphilitic chancre and so specific serological tests were performed. TPPA was reactive at a titre of 1:80 and VDRL at a titre of 1:16. Moreover, the ulcer swab tested with NAAT for TP was positive.

Enzyme-linked immunoassay (ELISA) test for HIV was performed in every patient at the time of diagnosis and after 3 months of follow-up, with negative results. All patients were treated with intramuscular benzathine penicillin G 2.4 million units, with complete resolution of the lesions. Three months after the treatment, VDRL became negative.

DISCUSSION

Syphilis is a sexually transmitted infection (STI) caused by TP (1). It is characterized by several different dermatological lesions, involving both the skin and the mucous membrane (1). In the first stage of the

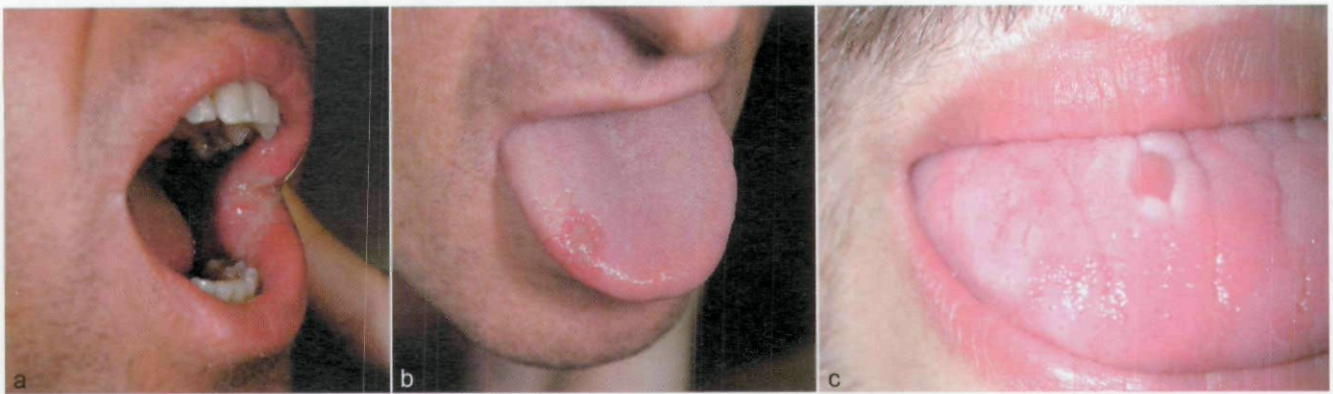


Fig. 1. (a) Case 1: syphilitic chancre of the left vestibular fornix. (b) Case 2: syphilitic chancre of the tongue. (c) Case 3: syphilitic chancre of the tongue.

disease an ulcerative lesion can occur at the site of TP inoculation (1); although they are commonly found in the genital area, syphilitic chancres have been described on almost any site of the body exposed to the infection (2–4, 6, 7).

The clinical features of genital and extragenital chancre are similar: a single asymptomatic nodular-ulcerative lesion, hard in consistency, reddish-brown in colour, associated with regional adenopathy (1). Syphilitic chancres can be atypical for number of lesions and clinical features, mainly in non-genital sites such as the oral cavity, where the aphthoid variant of primary syphilis has recently been described (8).

The evolution is the same for both genital and extragenital chancres, complete resolution being observed within 4 weeks (1).

At least 5% of syphilitic chancres are extragenital and the oral mucosa is the most frequently involved site, as consequence of unprotected orogenital contact, wrongly considered a safe sex practice (2–4). Other possible non-sexual modalities of infection in the oral cavity are kissing, drinking or using pipes immediately after syphilitic patients, as well as breastfeeding in children (9–11).

Extragenital chancres are often misdiagnosed due to lack of consideration of STIs in cases of lesions not involving the genitalia. We could speculate that the real incidence of extragenital syphilitic chancres is higher than the 5% reported in the literature, and thus it is essential for clinicians to maintain a high index of suspicion.

The diagnosis is confirmed by the specific serology and the demonstration of TP in the lesion: NAAT is better than dark-field microscopic examination in the case of oral lesions because of the possible presence of saprophytic treponemas in the mouth. In our patients NAAT was performed using the AmpliSens *Treponema pallidum* AA503 Kit (Nuclear Medicine Srl, Settala, Milano, Italy).

The therapy is the same for both genital and extragenital syphilitic chancres: for primary syphilis CDC

recommends the use of intramuscular Benzathine penicillin G 2.4 million units in a single dose (12).

In conclusion, we believe that any asymptomatic indurated ulcerative lesion that is spreading suddenly in any location on the body should be investigated with the suspicion of primary syphilis.

The authors declare no conflict of interest.

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