

## A Case of Syphilitic Chancre of the Tongue

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### ABSTRACT

*Initial presentation of syphilis may be the oral cavity. Because oral lesions are highly contagious, it is vital to make correct diagnosis and start therapy because interrupt chain of infection. In this article, we report a case of primary syphilis with extra genital chancre on the tongue.*

### Keywords

Syphilis, Tongue, Oral ulcer.

### Introduction

Syphilis is sexually transmitted infectious disease caused by *Treponema pallidum*, which is a spirochete bacterium. Due to its many protean clinical manifestations, it has been named the “great imitator and mimicker” [1,2].

Syphilis is transmitted sexually from person to person, either by direct contact with syphilis ulcers or by infected blood through micro traumas during sexual intercourse. Syphilis may also be transmitted by the transfusion of blood and blood components. Lastly, the fetus in the uterus before birth and develop into chronic infections disease may acquire syphilis: Congenital Syphilis. Syphilis remains a major public health problem with increasing incidence worldwide. It can be divided into primary syphilis, secondary syphilis, latent syphilis, and tertiary syphilis [3]. The chancre seen at the primary stage is classically a painless erosion overlying a firm papule, which emerges in genital areas in more than 90% of the patients. Primary syphilis of the mouth manifests as a solitary ulcer usually of the lip or tongue. There are several case reports about unspecific manifestation of syphilis in the oral cavity [4-9]. The ulceration of primary syphilis may be confused with traumatic ulceration, Squamous cell carcinoma or herpes simplex [10] However, extra genital chancres may differ from classic ones in terms of localization, amounts, size, depth, base,

and edges, therefore, may impose difficulties in diagnosis and detection. In this article, we report a case of primary syphilis with extra genital chancre on the tongue observed in a patient with a history of unprotected urogenital sex. The patient was treated in our clinic.

### Case Presentation

A 23-years-old bisexual man with a history of unprotected orogenital contact came to our clinic for the presence of an asymptomatic ulcerative lesion over the tongue (Figure 1). It was noted that the patient had previously consulted his family physician and dentist at another clinic with the same complaint. He was pre-diagnosed with herpes, and subjected to both systematic, and topical antiviral treatments during 10 days, without any results. Clinical examination revealed an isolated indurated two reddish 2- and 2,5-cm asymptomatic ulcer accompanied by lymphadenopathy. The ulceration was deep, with a red base and an irregular raised border. Extra oral clinical examination revealed a 3-cm nodule in the upper neck region that was asymptomatic and mobile. No other lesions were present. Both, serological tests and the cytology for oral herpes were negative. The clinical features and history suggested the possibility of an extra genital syphilitic chancre. He was referred for serologic reactive rapid plasma reagin (RPR) test, which turned to be positive at a titer of 1: 64. T. pallidum hem agglutination test (TPHA) was reactive with the titer of 1:80. Moreover, dark field microscopic examination of the ulcer swab confirmed, that the patient was positive for T. pallidum.

Patient was treated with intramuscular benzathine penicillin 2.4 million units. He experienced moderate chills and rigors in the first 24 h after the treatment, indicating to the Jarish-Herxheimer reaction. Physical examination after one week revealed that the oral lesion was significantly reduced (Figure 2). After three months of treatment, patient had negative RPR test result.



**Figure 1:** Initial extra genital chancre of the tongue.



**Figure 2:** The patient's ulcer regressed after 3 months of treatment.

## Discussion

As mentioned earlier, Syphilis is sexually transmitted disease caused by *Treponema pallidum*. Syphilis ulcers occur most commonly on the genitals and on the anal area, but can also occur on the lips or mouth. Syphilis also transmits vertically during

pregnancy. Another potential route of transmission is needle sharing [11].

Several different dermatological lesions, involving both the skin and mucous membranes, characterize syphilis. During the primary stage of syphilis, the painless ulcers develop, which occur at the site of *Treponema pallidum* inoculation – mostly in the genital areas. Syphilitic chancres have been described on almost any site of the body exposed to the infection: anus, oral cavity, lips, pharyngeal, and nipple - areola [12]. At least 5% of syphilitic chancres are extra genital and the oral mucosa is the most frequently exposed site, because of unprotected urogenital contact, wrongly considered as a safe sex practice [13]. Extra genital chancres are often misdiagnosed due to lack of consideration as STIs, since lesions do not involve genitalia [14]. We could speculate that the real incidence of extra genital syphilitic chancres is higher than the 5% reported in the literature and would like to point to the necessity for the clinicians to maintain a high index of suspicion.

The therapies for both genital and extra genital syphilitic chancres are identical: for primary syphilis CDC, guideline recommends the use of Benzathine penicillin G 2.4 million units once intramuscularly [15].

In conclusion, we strongly recommend that all asymptomatic indurated ulcerative lesions that appear and spread at any location on the body to be investigated with suspicion of primary syphilis.

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