

Watch the Tongue

A 35-year-old male newly diagnosed with human immunodeficiency virus (HIV) infection (last negative test was 1.5 years ago) presented with an odd sensation on his tongue for a day without any dysgeusia. This was the first time he had experienced this. He received treatment for presumed tinea infection over his palms and soles a month ago. On examination, shallow, slimy erosions were noted over the left lateral border of the tongue (Fig. 1). There was no palpable cervical lymphadenopathy. Hyperpigmented papulosquamous patches were present over bilateral palmoplantar surfaces. The rest of the physical examination was unremarkable.

What is the diagnosis?

- A. Oral hairy leukoplakia
- B. Tongue carcinoma
- C. Fixed drug eruption
- D. Syphilis
- E. Kaposi's sarcoma

Discussion

The clinical picture demonstrates the appearance of serpiginous oral ulcers, classically described as bearing a “snail-track appearance” – a pathognomonic hallmark of lesions seen in secondary syphilis. The rapid plasma reagin titre for this patient was 1:128 and treponema pallidum particle agglutination assay was reactive confirming the diagnosis. Dark-field examination of the ulcer base was negative. Intramuscular benzathine penicillin G (2.4 MU weekly for 3 weeks) was commenced with resolution of his oral lesions when he was reviewed 2 weeks thereafter. The expedient response to the appropriate treatment further confirms the diagnosis.

Oral ulcerations occur in 30% of cases of secondary syphilis, although it may be the sole clue to the presence of infection, albeit rarely.¹ They have been reported anywhere within the mucosal surface of the oral cavity. The suspicion of syphilitic infection requires a high index of suspicion during the history taking and the diagnosis can be clinched with positive serological tests. Lesional histopathology is



Fig. 1. Linear, slimy and shallow ulcers are seen over the left posterolateral aspect of the tongue (as indicated by the asterix).

non-specific, often yielding an abundance of plasma cells against a milieu of epidermal psoriasiform hyperplasia, although spirochetes may be detected with the Warthin-Starry stain.

Of note, oral ulcers may manifest both as part of primary or secondary syphilis. A useful clinical pearl to distinguish the two is that the ulcers stemming from spirochetemia of secondary syphilis are multiple and maybe symptomatic, as compared to the oral chancres of primary disease which are usually painless and solitary.² The former also tend to occur concurrently with the typical cutaneous papulosquamous stigmata as seen in our case above.

It should be noted that there are a variety of oral manifestations of secondary syphilis. It may present as asymptomatic diffuse macular erythema involving the uvula, tonsils and palate (specific angina)³ while papular lesions arising over the hard palate, buccal mucosae or commissures have also been reported.⁴ Mucous patches and erythematous plaques (plaques fauchée) may occur over the labial mucosa, buccal mucosa, palate, or tongue.⁵

In addition to oral disease, cutaneous appearances of secondary leutic disease may either present as macular, papular, pustular or ulceronodular morphologies.⁴

Answer: D

Ulceronodular disease (lues maligna), a generalised syndrome of fever, headache, myalgia and a nodulo-vesiculopustular eruption over the face and scalp have been reported; it has a preponderance to occur in patients with HIV co-infection.⁶

Patients with syphilitic and HIV co-infection tend to have an aggressive course of leucic disease as alluded to, along with more rapid progression to tertiary disease if left untreated.⁷ Moreover, it is recommended that higher doses of penicillin be used in patients with HIV infection, as opposed to HIV-negative patients, to eradicate treponemal disease effectively;⁸ that is, 3 doses of intramuscular benzathine penicillin G 2.4 MU weekly for the former group instead of 1 dose (some physicians may opt for 2 doses) for the latter.

In summary, this article highlights that although there may be a myriad of aetiologies for oral ulcers in HIV-positive patients, being cognisant of the unique clinical appearance of certain infections such as those in syphilis can allow for prompt and accurate diagnosis.

REFERENCES

1. Leão JC, Gueiros LA, Porter SR. Oral manifestations of syphilis. *Clinics* 2006;61:161-6.
2. Carlesimo M, Palese E, Mari E, Feliziani G, La Pietra M, De Marco G, et al. Isolated oral erosions: An unusual manifestation of secondary syphilis. *Dermatol Online J* 2008;14:23.
3. Dourmishev LA, Dourmishev AL. Syphilis: uncommon presentations in adults. *Clin Dermatol* 2005;23:555-64.
4. Kurien J, Kuriakose S. Doomed angels—a case report. *J Indian Soc Pedod Prev Dent* 1997;15:10-2.
5. Bonev A. Frequency and localization of syphilitic lesions in oral cavity. *Stomatology* 1980;3:134-8.
6. Kumar B, Muralidhar S. Malignant syphilis: a review. *AIDS Patient Care STDS* 2001;12:921-5.
7. Gregory N, Sanchez M, Buchness MR. The spectrum of syphilis in patients with human immunodeficiency virus infection. *J Am Acad Dermatol* 1990;22:1061-7.
8. Tucker SC, Yates VM, Thambar IV. Unusual skin ulceration in an HIV-positive patient who had cutaneous syphilis and neurosyphilis. *Br J Dermatol* 1997;136:946-8.

Joel HL Lim,¹ *MBBS, MRCP (UK), MMed (Int Med)*, Martin TW Chio,¹
MBBS, MRCP (UK), FRCP

¹Department of Dermatology, National Skin Centre, Singapore

Address for Correspondence: Dr Chio Tze-Wei Martin, National Skin Centre,
1, Mandalay Road, Singapore 308205.
Email: martinchio@nsc.gov.sg