

LETTER TO THE EDITOR

Painful interdigital lesion: could it be syphilis?

Editor

Syphilis is a sexually transmitted infection (STI) caused by the spirochaete *Treponema pallidum*.¹ Low- and medium-income countries are overburdened, nonetheless high-income countries also face an increasing incidence since the year 2000.² In Brazil, syphilis is a grave public health problem, with an incidence of 42.7 per 100.000 in 2015.³

Syphilis alternates periods of manifestations and clinical silence and may affect any organ or system with long-term devastating complications. The primary lesion occurs at the site of inoculation and consists of an erosion over an indurated base associated with regional lymphadenopathy.¹ The secondary phase, frequently associated with constitutional symptoms and mycopolyadenopathy, presents polymorphic mucocutaneous lesions. Early presentation consists of dull pink or coppery coloured macules and greyish mucous patches. Disseminated papules may appear, frequently encircled by a scaling collarette, especially on the palms and soles.⁴ Moist flat warty papules and plaques are seen less frequently clustering in the genital, anal and intergluteal regions. These syphilids are designated *condylomata lata*. Seldom, they can occur in the axillary, paranasal, inframammary folds and interdigital spaces.⁵ We report a case of a patient with secondary syphilis and a fissured lesion in the fourth interdigital space of the right foot.

A 22-year-old black male patient was seen at a public dermatology and STI clinic complaining of 'athlete's foot' which started one month ago. He denied previous history of fungal skin lesions. He complained of pain when walking and used topical antifungals without success. He reported that he had casual unprotected heterosexual activity regularly, including an episode of exposure to multiple sexual partners about six weeks before the present consultation. He had not noticed any genital lesion. He did not have any constitutional symptoms or other health problems. He denied the use of licit or illicit drugs and, also, denied treatment for any STI, including syphilis, in the past. A physical exam revealed a fissured lesion in the fourth interdigital space of the right foot. This lesion was moist, hypertrophic and hyperkeratotic (Fig. 1). There were also less evident coppery lesions, encircled by a scaling collarette in the palms and plants (Fig. 2) as well as mycopolyadenopathy. A rapid immunochromatographic test for syphilis was performed at the time of consultation, which resulted positive. Rapid tests for HIV and hepatitis B and C produced negative results.

Considering epidemiological, clinical and laboratory data, performing a biopsy was considered ethically inappropriate and a direct test for *T. pallidum* detection was not available at the time. The VDRL was obtained *post hoc* and was reagent until the title of 1:64. Treatment with benzathine penicillin resulted in complete healing of all lesions within two weeks. No topical treatment was used.

Genital *condylomata lata* are well-known lesions to dermatologists. Nonetheless, they can be occasionally confounded with lesions of *condyloma acuminata*, caused by human papilloma virus. In extragenital areas, diagnosis can be difficult. Differential diagnosis includes tinea pedis, Gram-negative mixed bacterial infection and erythrasma caused by *Corynebacterium minutissimum*.⁶ Macerated corns, plantar verrucae and tropical mycoses can also be considered. In some cases, these lesions may be the only physical sign of syphilis. Hence, it is important to keep a high index of suspicion in facing macerated hypertrophic lesions in skin folds. Considering the current syphilis epidemics, it is always important to maintain syphilis in the list of differential diagnosis of skin lesions of unknown aetiology, especially when risk factors are present. Timely diagnosis and treatment are crucial to interrupt the transmission and control of a curable



Figure 1 Interdigital fissured lesion, hypertrophic and hyperkeratotic.



Figure 2 Plantar coppery lesion encircled by scaling collarette.

disease, highly vulnerable to public health measures, but highly dependent on programmatic and social issues.

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