

## Images in Infectious Diseases

### Biett's sign: a hallmark sign of secondary syphilis

Fred Bernardes Filho<sup>[1]</sup>, Ana Laura Rosifini Alves Rezende<sup>[1]</sup>  
and Marcos Davi Gomes de Sousa<sup>[2]</sup>

[1]. Divisão de Dermatologia, Departamento de Clínica Médica, Faculdade de Medicina de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto, SP, Brasil.

[2]. Instituto Nacional de Infectologia Evandro Chagas, Fundação Oswaldo Cruz, Rio de Janeiro, RJ, Brasil.

A previously healthy 39-year-old man presented with a 2-week history of a painless diffuse erythematous rash (Figure 1). He had had multiple sexual partners and unprotected intercourse. Physical examination showed diffuse lymphadenopathy and multiple erythematous macules (diameter, 1–2 cm) with an off-white scaly peripheral collarette (Biett's sign) (Figure 2), which are typical findings of syphilitic roseola. Screening for sexually transmitted infections revealed positive results on Venereal Disease Research Laboratory (titer 1:256) and *Treponema pallidum* hemagglutination tests; serologically, he tested negative for human immunodeficiency virus, hepatitis B, and hepatitis C. He received a total of 4.8 million units of penicillin G benzathine over two weeks. At the 1-month follow-up, cutaneous lesions were absent; he was asymptomatic.

Syphilis is a sexually transmitted infection that is re-emerging with increasing prevalence worldwide<sup>1,2</sup>. Secondary syphilis shows two typical types of rash: one occurring early in this phase called syphilitic roseolas, characterized by light pink to erythematous macules, and one occurring later in this phase named syphilids, marked by erythematous papules<sup>2,3</sup>. Both have hallmark collarette scales, known as Biett's sign. Additionally, cutaneous manifestations may demonstrate atypical morphology, such as nodulo-ulcerative, annular, and pustular lesions, among others<sup>1,3</sup>. Due to varied clinical presentations, secondary syphilis is recognized as “the great imitator” and must be considered as a differential diagnosis of all dermatoses with atypical presentation. All secondary syphilis



FIGURE 1: Diffuse erythematous macules with collarette scales.

FIGURE 2: Syphilitic roseolas with Biett's sign.

cutaneous lesions contain highly contagious spirochetes; its non-recognition and late treatment favor an increased risk of disease transmission.

**Conflict of interest:** The authors declare that there is no conflict of interest.

#### REFERENCES

1. Avelleira JCR, Bottino G. Syphilis: diagnosis, treatment and control. *An Bras Dermatol*. 2006;81(2):111-26.
2. Peeling RW, Mabey D, Kamb ML, Chen XS, Radolf JD, Benzaken AS. Syphilis. *Nat Rev Dis Primers*. 2017;3:17073.
3. Hook EW Rd. Syphilis. *Lancet*. 2017;389(10078):1550-57.

**Corresponding author:** Dr. Fred Bernardes Filho.

**e-mail:** f9filho@gmail.com

**Orcid:** 0000-0003-4690-1608

**Received** 6 November 2018

**Accepted** 17 December 2018

