Syphilis: An Increasingly Common Sight Among Pediatricians?

Miguel Labrusco, Filipa Briosa, Lígia Paulos, Sofia Lima

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A 15-year-old female was admitted to the pediatric emergency department reporting a one-week history of pruritic rash involving palmoplantar surfaces of the hands and one foot. She was apyretic and reported no constitutional or rheumatologic symptoms. Upon questioning, she mentioned a painless lesion in the vulvar region one month beforehand, with spontaneous remission shortly afterward. Relevant previous history included unprotected sexual intercourse with multiple partners since she was 12 years old.

Physical examination revealed multiple symmetric erythematous round macules (1-2 cm in diameter) involving both palms and the sole of the right foot (Fig. 1) as well as multiple vulvar ulcers (Fig. 2).

Serological testing was positive for the venereal disease research laboratory (VDRL) test and *Treponema pallidum* hemagglutination assay (TPHA), confirming the diagnosis of secondary syphilis. Further investigation revealed negative serological testing for hepatitis B and C and for human immunodeficiency virus (HIV). Polymerase chain reaction of the endocervical exudate for both *Chlamydia trachomatis* and *Neisseria gonorrhoeae* was also negative.

She was treated with a single dose of 2.4 million units of intramuscular penicillin and referred to the outpatient clinic. The disease was properly notified, and all of the partners were advised.

Upon revaluation, she had experienced a significant clinical improvement, with the remission of all the mentioned lesions, VDRL with lower levels, positive TPHA, and HIV remaining negative six months after treatment.

Syphilis is an infection caused by the spirochete *Treponema pallidum*.[1,2] It continues to cause significant morbidity and mortality worldwide, including in adolescents. In 2018, in Europe, 13% of confirmed infections were in people aged 15 to 24 years-old.[3,4] In Portugal, the incidence of syphilis has been rising since 2014.[3] Without treatment, it can manifest as a three-stage disease.[2] The observed macular rash is characteristic of secondary syphilis and should elicit the diagnosis, especially when preceded by the characteristic chancre of primary syphilis.[2] Diagnosis should be confirmed with both treponemal and nontreponemal testing.[2] Parentally-delivered penicillin G is the treatment of choice in all stages of syphilis.[1,2]

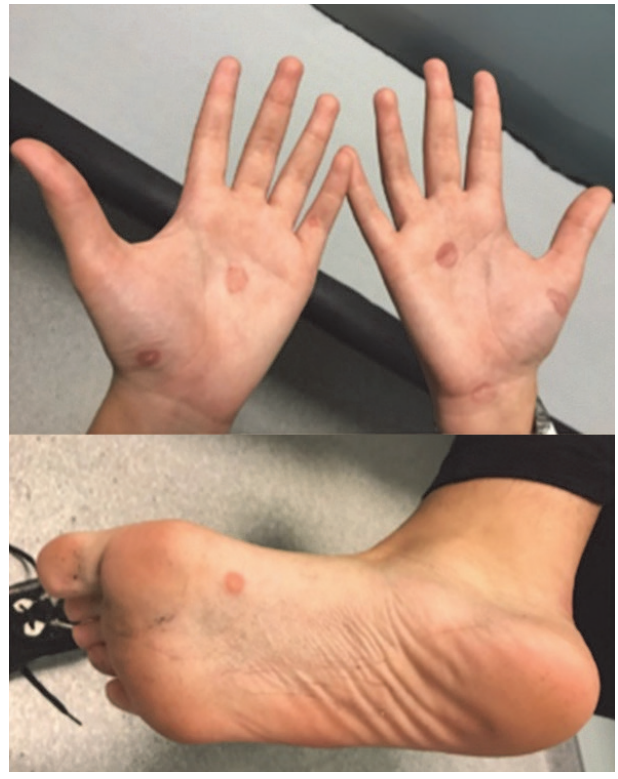

Figure 1. Secondary syphilis in the palms and sole.

Figure 2. Secondary syphilis: genital ulcers.

Medical Pediatrics Department, Hospital Beatriz Ângelo, Loures, Portugal
Corresponding Author
Miguel Labrusco
https://orcid.org/0000-0003-4979-0632
miguel.tomas.labrusco@hbeatrizangelo.pt
Rua dos Lírios, 35, Herdade da Aroeira, 2820-561 Charneca da Caparica, Portugal
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WHAT THIS REPORT ADDS

- A high index of suspicion and a complete history regarding previous sexual history are crucial in any adolescent that presents at the emergency service with a palmoplantar rash.

Conflicts of Interest

The authors declare that there were no conflicts of interest in conducting this work.

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Confidentiality of data

The authors declare that they have followed the protocols of their work centre on the publication of patient data.

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