

CASE REPORT

Extensive Condylomata Lata as the Only Manifestation of Secondary Syphilis

Condiloma Lata Exuberante como a Única Manifestação de Sífilis Secundária

Received/Recebido
2021/02/01Accepted/Aceite
2021/03/15Published/Publicado
2021/09/30Rita Bouceiro-Mendes¹, Leandro Silva², Pablo Espinosa-Lara¹, Luís Soares-de-Almeida^{1,3}, J. Borges-da-Costa^{1,3,4}¹Dermatology Department, Hospital de Santa Maria, Centro Hospitalar e Universitário Lisboa Norte, Lisboa, Portugal;²Dermatology Department, Hospital Egas Moniz, Lisboa, Portugal;³Faculdade de Medicina da Universidade de Lisboa, Lisboa, Portugal;⁴Instituto de Higiene e Medicina Tropical, Lisboa, Portugal

ABSTRACT – Syphilis is a sexually transmitted infection with a multiplicity of clinical presentations that has been known for centuries. Recently, a new wave of syphilis has been reported in developed countries and men who have sex with men, especially those coinfecting with human immunodeficiency virus (HIV), have the highest rates of syphilis infection. In these patients, cutaneous manifestation can be even more diverse. We report a case of secondary syphilis in a young male patient coinfecting with HIV whose presentation consisted of extensive condylomata lata lesions.

KEYWORDS – Condylomata Acuminata/etiology; Syphilis/complications; Syphilis, Cutaneous/complications.

RESUMO – A sífilis é uma doença de transmissão sexual com um vasto leque de manifestações clínicas, conhecida desde há séculos. Nos últimos anos, esta infeção tem ressurgido nos países desenvolvidos, especialmente no grupo de homens que têm sexo com homens (HSH). Dentro deste grupo populacional, a incidência de sífilis atinge o pico, naqueles com infeção concomitante pelo vírus da imunodeficiência humana (VIH). Nestes doentes, as manifestações de sífilis são ainda mais diversificadas e atípicas. Descrevemos um caso de sífilis secundária num doente HSH com coinfeção pelo VIH, cuja manifestação consistiu unicamente em lesões extensas de condiloma lata.

PALAVRAS-CHAVE – Condiloma Acuminado/etiologia; Sífilis/complicações; Sífilis Cutânea/complicações.

INTRODUCTION

Syphilis is an infectious disease caused by the bacteria *Treponema pallidum* that is transmitted through direct contact with infected mucosal lesions. It is most commonly transmitted by sexual contact, but it can also be spread congenitally.¹⁻⁴ Thirty percent of sexual partners of recently infected patients develop syphilis.^{3,5} In infected individuals, *T. pallidum* disseminates within days after infection resulting in early invasion of distant tissues.⁶ Clinical manifestations are the result of inflammatory responses elicited by the replicating bacteria within the tissues^{1,4} and are highly variable often mimicking those of other diseases.^{1,4,5} If left untreated the disease can progress over years through four stages (primary, secondary, latent, and tertiary) and lead to serious cardiovascular or neurological complications.^{2,4} The primary stage of the infection is classically defined by an asymptomatic, indurated genital ulcer at the inoculation site.^{3,7} Secondary stage usually occurs 6 to 8 weeks after the onset of the primary phase⁸ and it is the most florid and clinical diverse stage of the disease.^{5,9} It classically features a symmetric, copper-coloured, maculopapular skin rash of any morphology, presenting typically on the palmar and plantar surfaces.³ Verrucous lesions, appearing as moist exophytic plaques, especially on mucous surfaces, referred as condylomata lata, have also been described.⁷ Syphilis remains a worldwide problem and incidence rates have increased substantially around the world especially in men who have sex with men (MSM) and in human immunodeficiency virus (HIV) infected individuals.^{3,6,8}

CASE REPORT

A 24-year-old Caucasian male patient was observed in our Dermatology Department for a one-month history of mildly pruritic and painful growing perianal skin lesions. The patient was HIV-seropositive, and he was on antiretroviral therapy with regular appointments (CD4 cell count was normal and viral load was undetectable). He referred one sexual male partner in the last 6-months and reported no history of genital ulcer nor other previous skin lesions.

Physical examination revealed multi-lobulated masses in the perianal area forming rubbery, skin-coloured, plaques and masses with a smooth and moist surface (Fig. 1A). Broad-based papillomatous whitish plaques were also observed in the oral mucosa (Fig. 1B). There were no abnormal cutaneous findings on his palms, soles, trunk or extremities, or any sign of concomitant systemic disease.

A 4-mm punch skin biopsy of the perianal lesions and serological tests were performed. *T. pallidum* antibodies in the patient's serum were reactive, *T. pallidum* hemagglutination (TPHA) assay was positive. In addition, rapid plasma reagin (RPR) titer was positive and the Venereal Disease Research Laboratory (VDRL) test was reactive (128 dil). Hepatitis C virus, and hepatitis B virus serology results were negative. Histopathology of the skin biopsy showed irregular acanthosis and papillomatosis, along with endothelial cell swelling and a prominent dermal infiltrate, rich in lymphocytes and plasma cells (Fig. 2A & B). Immunohistochemical stains using



Figure 1 - Condylomata lata, clinical picture: (A) Multi-lobulated masses in the perianal area forming rubbery, skin-colored, plaques and masses with a smooth and moist surface; (B) Broad-based papillomatous whitish plaques in the oral mucosa.

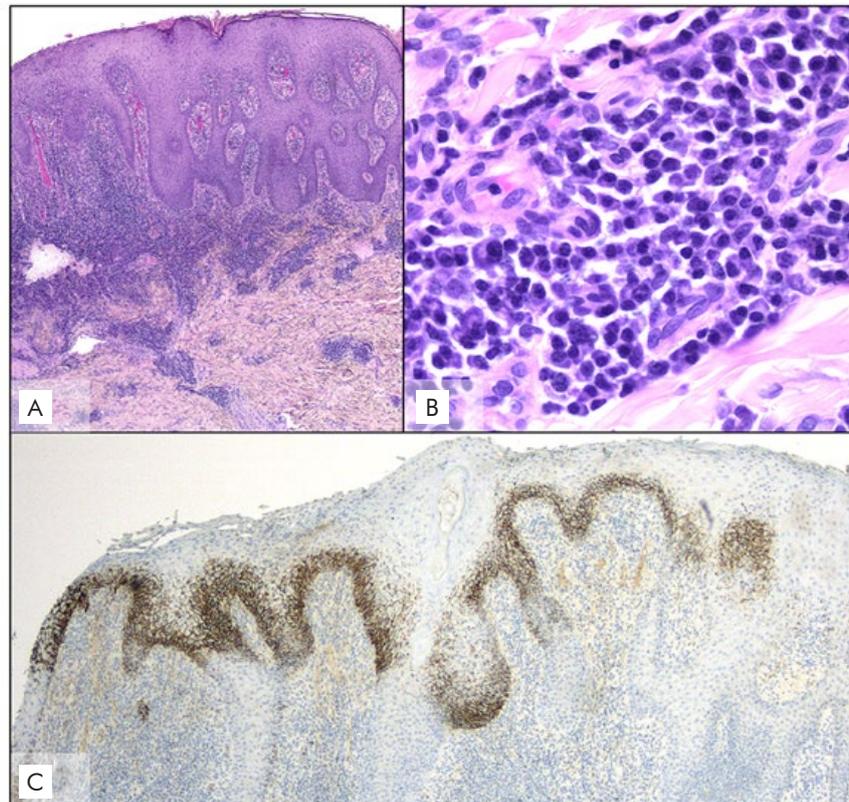


Figure 2 - Condylomata lata, histopathological picture: (A) irregular acanthosis and papillomatosis, along with endothelial cell swelling and prominent dermal infiltrate rich in lymphocytes and plasma cells (H&E, x25); (B) Plasma cells are clearly observed within the dermal infiltrate (H&E, x400); (C) Section of the skin biopsy tissue stained with antibodies against treponemal antigens, showing the direct detection of the spirochetes (x40).

antibodies to treponemal antigens allowed the direct detection of the spirochetes (Fig. 2C). A diagnosis of secondary syphilis, presenting as perianal and oral mucous condylomata lata, was made. The patient was treated with a single dose of 2.4 million units IM of penicillin G benzathine and advised to inform the partner for testing and treatment. Lesions resolved completely in 3 months.

DISCUSSION

We reported a case of secondary syphilis presenting solely as extensive condylomata lata lesions in a young male patient with HIV coinfection. Concomitant HIV and syphilis infection is becoming increasingly common since the presence of one infection facilitates the

acquisition of the other and both conditions have the same route of infection.⁵ Besides, preexposure HIV prophylaxis is also contributing to syphilis dissemination among this community, due to decreased condom use.⁶ This is important because many atypical and, well-characterized but less frequent syphilis presentations have been described in patients with HIV coinfection. This diversity of clinical signs is more common during the secondary stage of syphilis.^{5,7,9} Since syphilis is more common in MSM, a population with also high rates of HIV infection, awareness of these less common presentations that may lead to delayed diagnosis and treatment is important. In our case, the clinical presentation and the sexual history could be suggestive of condylomata lata, although extensive lesions with no other accompanying symptoms are not commonly described.¹⁰ Condylomata lata, are highly infectious, intertriginous moist papules, typically associated with secondary syphilis, but less frequently observed, reported in 9%-44% of cases.¹¹ They occur mainly on the perianal area and the vulva although atypical locations (palms, face, ankle, umbilicus and toe webs) have been described.¹² Differential diagnosis includes verruca vulgaris, condylomata acuminatum, Hailey-Hailey¹⁰ and Buschke-Löwenstein tumor.¹³ Condylomata lata histopathology is variable but a skin biopsy revealing a dense plasma cell infiltrate and spirochetes visualized by silver or immunohistochemical stains confirms the diagnosis.^{14,15} Direct detection of *T. pallidum* may be used in patients presenting with chancre, condylomata lata or lesions of congenital syphilis however, secondary syphilis diagnosis does not necessarily require histopathological examination of a skin biopsy.^{4,15,16} In fact, the diagnosis is usually based on the patient's history, physical examination, and serologic testing that involve treponemal and nontreponemal tests.^{4,6,15}

Treatment recommendations do not depend on HIV status or nontreponemal test titer.¹⁵ Patients should be monitored at 6 and 12 months after treatment.

Syphilis remains an important public health and clinical problem with increasing rates among MSM. Besides, frequent co-infection of HIV and syphilis in this population is frequent. Clinicians should keep in mind that in HIV infected patients severe, persistent, and atypical manifestation are more common. The present case shows extensive condylomata lata lesions as the only manifestation of secondary syphilis in an HIV infected patient. A high index of suspicion is essential not to miss the diagnosis.

Acknowledgements

We thank Dr. Isabel Viana for performing the immunohistochemical study.

Conflicts of Interest: The authors have no conflicts of interest to declare. **Financing Support:** This work has not received any contribution, grant or scholarship. **Confidentiality of Data:** The authors declare that they have followed the protocols of their work center on the publication of data from patients. **Patient Consent:** Consent for publication was obtained. **Provenance and Peer Review:** Not commissioned; externally peer reviewed.

Conflitos de Interesse: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho. **Fontes de Financiamento:** Não existiram fontes externas de financiamento para a realização deste artigo.

Confidencialidade dos Dados: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes. *Consentimento:* Consentimento do doente para publicação obtido. *Proveniência e Revisão por Pares:* Não comissionado; revisão externa por pares.

ORCID

Rita Bouceiro-Mendes: <https://orcid.org/0000-0002-5034-3613>
Leandro Silva: <https://orcid.org/0000-0001-7804-3092>
Pablo Espinosa-Lara: <https://orcid.org/0000-0003-0692-7301>
Luis Soares-de-Almeida: <https://orcid.org/0000-0003-4026-6105>
J. Borges-da-Costa: <https://orcid.org/0000-0001-8903-209X>

Corresponding Author: Rita Bouceiro Mendes

Address: Hospital de Santa Maria - Serviço de Dermatologia, Piso 8
Av. Prof. Egas Moniz, 1649-035 Lisboa
E-mail: rita.bouceiro.mendes@gmail.com

© Author(s) (or their employer(s)) 2021 SPDV Journal. Re-use permitted under CC BY-NC. No commercial re-use.

© Autor (es) (ou seu (s) empregador (es)) 2021 Revista SPDV. Reutilização permitida de acordo com CC BY-NC. Nenhuma reutilização comercial.

REFERENCES

- Çakmak SK, Tamer E, Karadağ AS, Waugh M. Syphilis: A great imitator. *Clin Dermatol*. 2019;37:182-91. doi: 10.1016/j.clindermatol.2019.01.007.
- Hook EW, 3rd. Syphilis. *Lancet*. 2017;15;389:1550-7. doi: 10.1016/S0140-6736(16)32411-4.
- OByrne P, MacPherson P. Syphilis. *BMJ*. 2019;365:14159. doi: 10.1136/bmj.14159.
- Peeling RW, Mabey D, Kamb ML, Chen XS, Radolf JD, Benzaken AS. Syphilis. *Nat Rev Dis Primers*. 2017;3:17073. doi: 10.1038/nrdp.2017.73.
- Ivars Lleó M, Clavo Escibano P, Menéndez Prieto B. Atypical cutaneous manifestations in syphilis. *Actas Dermosifiliogr*. 2016;107:275-83. doi: 10.1016/j.ad.2015.11.002.
- Ghanem KG, Ram S, Rice PA. The modern epidemic of syphilis. *N Engl J Med*. 2020;382(9):845-54. doi: 10.1056/NEJMr1901593.
- Yancheva N, Petrova E, Tcherveniyakova T. Atypical secondary syphilis presentation in a patient with human immunodeficiency virus infection: a case report. *J Med Case Reports*. 2019;13:360.
- Puccio JA, Cannon A, Derasari K, Friend R. Resurgence of syphilis. *Adv Pediatr*. 2019;66:231-44. doi: 10.1016/j.yapd.2019.03.006.
- De Carvalho Fagundes FN, Simoes JP, Pereira Magnago AG, De Sousa Brito Xavier MH. Annular and arcuate syphilis: an uncommon presentation of disseminated secondary syphilis. *Dermatol Online J*. 2018;24:13030/qt2nb2k1xd.
- Hua H, Zhu X, Yang L, Li M, Jiang P. Multiple condylomata lata: a case report. *Int J Dermatol*. 2008;47:56-8.
- Aggarwal P, Aggarwal K, Jain VK. Extensive condylomata lata in an adolescent: An uncommon and unusual presentation. *Indian J Sex Transm Dis AIDS*. 2019;40:165-7. doi: 10.4103/ijstd.IJSTD_63_16.
- Ikeda E, Goto A, Suzuki R, Sawada M, Dekio I, Ishizaki S, et al. Condylomata lata on the ankle: an unusual location. *Dermatol Pract Concept*. 2016;6:49-51. doi: 10.5826/dpc.0602a09.
- Pinto-Gouveia M, Pinho A, Reis JP. Condylomata Lata Mimicking Buschke-Löwenstein Tumor. *Acta Med Port*. 2016;29:231.
- Toyal S, Shaban F, Dasgupta K, Tabaqchali MA. A case of syphilitic anal condylomata lata mimicking malignancy. *Int J Surg Case Rep*. 2015;17:69-71.
- Forrestel AK, Kovarik CL, Katz KA. Sexually acquired syphilis: Laboratory diagnosis, management, and prevention. *J Am Acad Dermatol*. 2020;82:17-28. doi: 10.1016/j.jaad.2019.02.074.
- Katz AR, Johnson DW, Komeya AY, Tomas JE, Namiki TS, Kobayashi K. Dermatologically challenging syphilis presentation. *Int J STD AIDS*. 2019;30:707-9. doi: 10.1177/0956462418817636.