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RHEUMATOLOGICAL MANIFESTATIONS SECONDARY TO SYPHILIS

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Rheumatological Manifestations Secondary to Syphilis.

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ABSTRACT

Syphilis is an infectious pathology caused by the bacterium Treponema pallidum, which can present different signs and symptoms, including the mimicry of other diseases. This infection has increased in incidence since the 1980s, and this fact is related to risk behaviors and the diagnostic evolution of medical practice. This article portrays the case of a 50-year-old patient with fever, purpuric lesion in the lower limbs and bilateral inflammatory low back pain, without other symptoms that suggested an infectious focus. The biopsy of the lesion in the lower limbs revealed findings compatible with leukocytoclastic vasculitis, the performance of a lumbosacral spine tomography revealed bilateral sacroiliitis and the serum evaluation documented syphilis infection, with this clinical presentation described with resolution with the relevant antibiotic administration.

KEYWORDS: Syphilis, Rheumatological Manifestations.

INTRODUCTION

Syphilis is a sexually transmitted infection (STI) caused by the bacterium Treponema pallidum that can present several clinical manifestations, including the mimicry of other diseases.[1,2] This STI showed a decreasing pattern of its incidence until 1980, but since that decade there has been an increase in these rates, and this fact is attributed to social factors, such as drug addiction and sexual promiscuity, and technological development, as the greater effectiveness of the methods screening and diagnosis, in addition to the insertion of this STI as mandatory notification.[1,3]

In 2010, the World Health Organization (WHO) estimated 11 million new syphilitic cases in the world.[1,3] Acquired syphilis had its detection rate increased from 2.0 cases / 100 thousand inhabitants in 2010 to 58.1 cases / 100 thousand inhabitants in 2017.[3] Regarding the distribution of cases of this STI in the Brazilian territory, the region with the highest number of notifications in 2016 was the southeast region, with 45.5% of cases, with the most affected age group being 20-39 years (56.6%).[3]

This disease can present with systemic or localized symptoms, periods of activity and latency, in addition to evolving with serious complications, if not treated or treated improperly.[4] The standardized clinical presentation will determine the stage of the disease, which can be recent, divided into primary, secondary and recent latent when up to one year of evolution; and late syphilis (late and tertiary latent) when more than one year of evolution.[5]

The primary classic clinical presentation is the appearance of a painless genital ulcer, which disappears in two to four weeks without leaving a scar.[1] Secondary syphilis - the stage in which vasculitic syphilis occurs - is the result of hematogenous dissemination of the infection and usually appears on average between six weeks to six months after the lesions has healed, although manifestations of secondary disease can occur in a period of up to one year, affecting skin and internal organs, with symmetrical cutaneous manifestations (syphilitic roseola), arthralgia, generalized lymphadenopathy and fever being more prevalent.[1,4,5] The tertiary stage, on the other hand, can occur up to 40 years after infection and may lead to cardiac, bone, tabes dorsalis, paresis and other neurological symptoms.[5,6]

The diagnosis of syphilis can be made by direct exams and immunological tests. The direct examination is done by searching the bacteria in samples of the lesions, used in the early stages of the disease. Immunological tests are divided into two groups: the treponemic ones, which detect specific antibodies against T. pallidum and the

non-treponemic ones, which detect non-specific antibodies and assist in the monitoring of the disease.[1,7]

Given the pleiomorphic character of the clinical presentation of syphilis, the objective of this text is to report the case of secondary syphilis that manifested itself as a cutaneous vasculitis.

CASE REPORT

W.S.V., 50 years old, female, referred for 2 weeks bilateral inflammatory low back pain, accompanied by fever, anorexia, without other symptoms that suggested a possible infectious focus. On the day of the medical visit, she referred to the appearance of erythematous-painful lesions in the anterior tibial region bilaterally, compatible with petechiae and purpura. Patient with systemic arterial hypertension and diabetes mellitus for 4 years on regular use of medication. On physical examination, a febrile patient (38.1°), without lymph node enlargement, without neurological changes, tachycardia and without murmurs. In the lower limbs, the presence of purpuric lesions bilaterally (figure 1A). In lumbar evaluation, she presented pain on palpation in topography of sacroiliac.

Propaedeutics showed evidence of high inflammatory activity, negative cultures, normal blood count, normal transthoracic echocardiogram. Lumbosacral spine tomography showed subchondral sclerosis in sacroiliac joints, suggestive of sacroiliitis. Biopsy of the skin lesion was requested, which described the presence of fibrinoid necrosis in the vascular wall with leukocytoclasia compatible with leukocytoclastic vasculitis (figure 1B). Serology for hepatitis and HIV negative, in addition to VDRL 1:32 and positive FTA-ABS.

In view of these findings, therapy with penicillin was initiated and within 48 hours there was a cessation of fever episodes, in addition to pain relief for low back pain and skin lesions.

This work was approved by the ethics committee of the Centro Universitario de Valença.

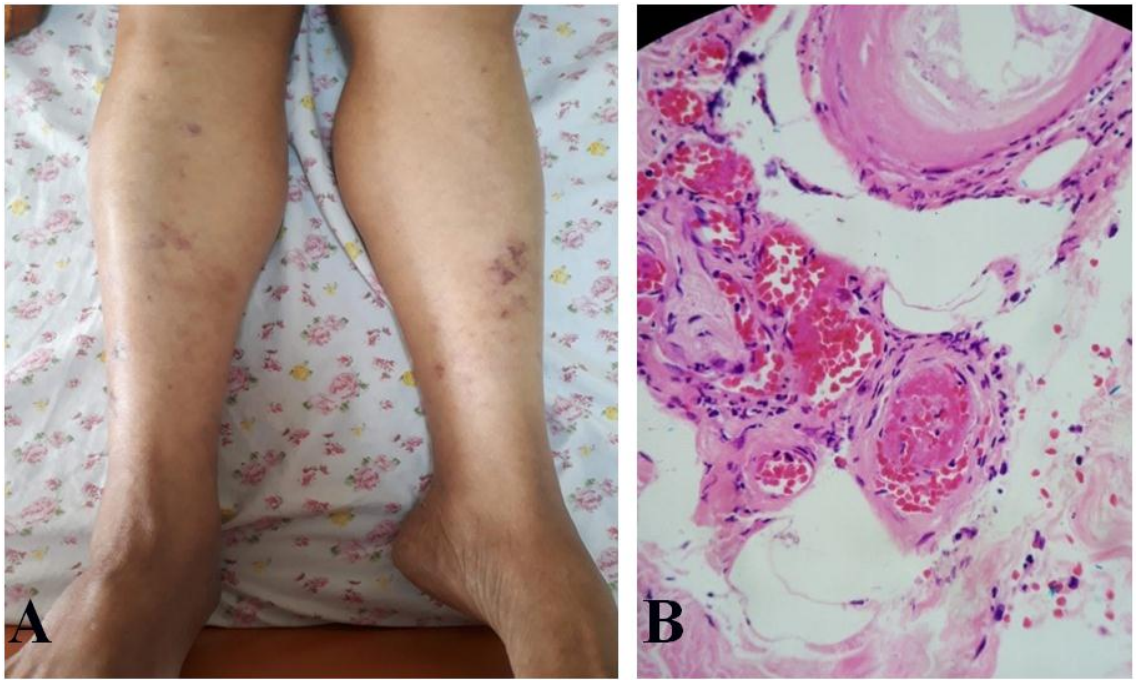

Figure 1: A- Purpuric and petechial lesions in the anterior tibial region. B- Photo in HE, with 400x magnification, showing a vessel with a microthrombus and an inflammatory infiltrate with neutrophils and debris in the interstitium.

CONCLUSION

Syphilis is an STI that can affect different sites according to the evolution of the infection. The most diverse stage of this disease is the secondary one, presenting a variety of manifestations, being called "great imitator" due to its characteristic of mimicking other pathologies, among them rheumatological diseases.[6,8,9] The incorrect therapeutic approach, as well as delaying the diagnosis, is what predisposes the patient to the evolution of the disease, making it go through its stages, being subjected to the variance of signs and symptoms.

In the secondary stage, typical cutaneous manifestations are erythematous-painful macules, called rosettes, which appear diffusely, but mainly in the plantar and palm regions.[1,4] The great challenge established concerns the fact that there are multiple cutaneous presentations of syphilis, and thus there is a wide differential diagnosis. As an example, we have vasculitic lesions, such as those found in the case described, in addition to papules, nodular ulcerative lesions, corimbiform, psoriasiform, raspberry-like, pustular, pemphigoid aspect and alopecia.[2,8,10] Therefore, in view of the multiplicity of

diagnoses, the histopathological study becomes an important piece for the clarification of cases, always added to a complete approach to the patient's clinical history.

Still in the secondary stage, there are other nonspecific signs and symptoms that can often trigger important diagnostic delays such as fever, arthralgia, headache, anorexia, odynophagia, alopecia, nail lesions, glomerulonephritis, hepatosplenomegaly, among others.[6,11] In the case described, the initial presence of fever, vasculitic skin lesions and musculoskeletal involvement, caused the patient to be referred to the rheumatology service. In the light of the literature, there are multiple diagnoses that can be mimicked by syphilis such as systemic lupus erythematosus, vasculitis, rheumatoid arthritis, Still's disease, among others, but sometimes musculoskeletal involvement can predominate.[11]

The characteristics of low back pain presented in the reported case are compatible with those found in the literature, which has inflammatory characteristics, associated with prolonged morning stiffness and has a good response to treatment with penicillin. The occurrence of unilateral sacroiliitis with radiological expression has been described in one patient and spondylitis is rare.[6]

It is worth remembering that in the case of STIs, the investigation of HIV is mandatory, as there is a real chance of co-infection.[7,9] In this scenario of immunosuppression, there may be an increase in the severity of syphilis cases, false-negative results for complementary evaluations may occur, in addition to generating even more atypical clinical presentations.[7,9] In seropositive patients, the evolution of syphilis is modified, leading to the appearance of multiple lesions instead of a single one and the evolution of the stages occurs in a shorter period of time.[7]

Therefore, it is clear that this variety of possible signs and symptoms of patients with syphilis, triggers the need for a thorough analysis of these individuals so that incorrect diagnoses are not made or the maintenance of the current sad situation is reinforced.

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