Follmann balanitis and anetoderma in secondary syphilis

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Abstract

Syphilitic balanitis of Follmann (FB) is a rarely described manifestation of primary syphilis that was first reported in 1948. Its clinical appearance may be heterogeneous varying from painful edematous balanoposthitis to superficial erosive balanitis and asymptomatic glans induration. We described a patient presenting with FB, as manifestation of primary syphilis, and concurrent anetoderma, as manifestation of secondary syphilis. The association of these lesions was never described to date.

Case Report

A 37-year-old male presented us with a balanitis of 1-year duration that was previously diagnosed as *Candida balanoposthitis* and treated with topical and systemic fluconazole and itraconazole without improvement. After 3 months from the beginning of balanitis, an asymptomatic skin eruption developed accompanied by fatigue and arthralgias and, 8 months later, by vegetating papules on the pubic region. Physical examination revealed a diffuse erythema of the glans with slightly indurated, asymptomatic rose-colored patches and oedema of the coronal sulcus (Figure 1A). A painless lymphadenomegaly was present on the right groin. Discrete oval macules on the cleavage lines of the trunk and few, symmetric, skin-colored, finely wrinkled atrophic areas on the medial surface of both arms were observed. On the pubic region there were hypertrophic and eroded coalescing papules (Figure 1B).

Multiplex polymerase chain reaction (PCR) test for sexually transmitted pathogens, including chlamydia, mycoplasma and *Neisseria gonorrhoeae*, and bacterial-fungal cultures on two glans swabs proved negative. Serology for HIV was negative while venereal disease research laboratory (VDRL) and Treponema pallidum hemagglutination assay (TPHA) tests were positive with respective titres of 1:2 and 1:1280. IgM Treponema pallidum enzyme immunoassay was also positive. A diagnosis of Follmann Balanitis (FB) and secondary syphilis was made.[1,2] The patient was treated with the conventional benzathine penicillin G therapy (two intramuscular injections each of 1.2 million units) followed by an enhanced antibiotic therapy with ceftriaxone and doxycycline, as previously described.[3,4]

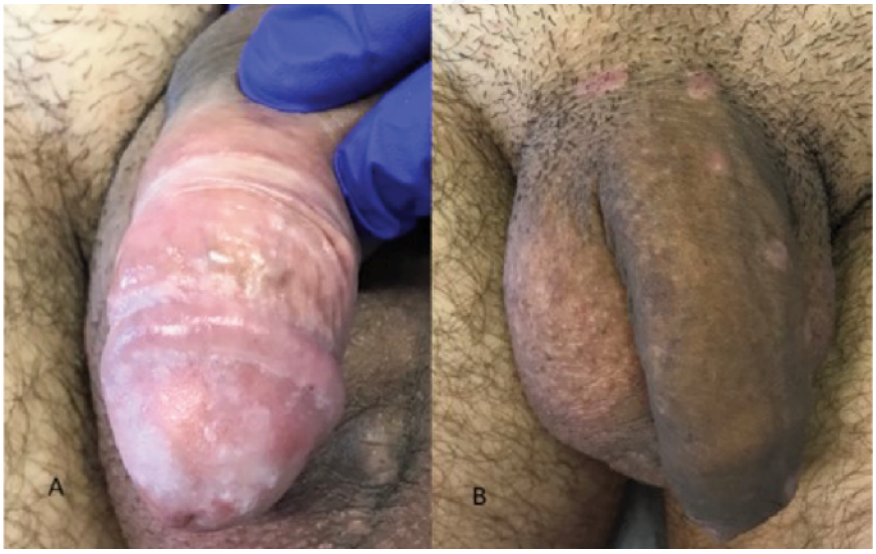

Figure 1. A) Erythema of the glans with figurate rose-colored slightly elevated patches and oedema of the coronal sulcus; B) rose-colored hypertrophic and eroded coalescing papules on the pubic region.

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Discussion and conclusions

FB is a rare, but probably underestimated, condition exhibiting various clinical aspects. The syphilitic chancre is absent in most cases and FB may be considered a primary syphilitic lesion.[2] In other cases, a typical chancre is associated or follows FB. Lejman and Starzychi published in 1975 a case in which FB was preceded by a typical chancre.[5] In a biopsy, they detected a massive collection of *Treponema pallidum* in the epidermis and scarce treponemes in the dermis and in the capillaries walls. Their conclusion was that the intraepidermal treponemes were of hematogenous origin.[5] However, considering that the dark-field examination was positive both in the chancre and balanitis and that the lesions on the glans had developed almost simultaneously, we suppose more likely that the intraepidermal treponemes spotted their point of entry at infection. Our patient had simultaneously a primary lesion (FB) and lesions of secondary syphilis (roseola and anetoderma). Actually, an extant or past primary lesion is present in one-third of patients with secondary syphilis and syphilitic anetoderma is very rare. BF represents a challenge even for experienced dermatologists. To avoid misinterpretations, physicians should pay attention to unilateral lymphadenopathy and consider BF in any case of chronic balanoposthitis.

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