DIFFERENT LESIONS IN DIFFERENT STAGES. A CASE OF SECONDARY SYPHILIS

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Summary

Introduction: *Secondary syphilis, also known as the „great imitator", represents a great challenge for the clinician because of the polymorphism of it's clinical manifestations.*

Case presentation: *A 44-year -old male patient, affirmatively heterosexual, presented for asymptomatyc polymorphous skin and mucosal lesions. Clinical examination reveals pink macules in the abdominal region, brick-red annular plaques on the abdominal area, purple-red nodules with peripheral descuamation on the back, scaling erythematous lesions on the scrotum and penis, greasy scale covered erythematous lesions on the scalp, neck and face, purple-red lesion with central palling in the axilar region. We do not noted any pathological changes of the hair and nails. At the general examination, we found generalized painless microadenopathies and the patient complained for diffuse muscle pain. Serological reactions were highly, Treponema Pallidum Hemagglutination Assay (TPHA) 1:10240, Venereal disease research laboratory (VDRL) 1:32. Based on the clinical and laboratory findings, the diagnosis of secondary syphilis was established and treatment with Benzatin Penicilin was performed with remision of the lesions.*

Conclusion: *Atypical polymorphous skin eruptions impose serological testing for syphilis.*

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Introduction

Syphilis is an infectious disease caused by *Treponema Pallidum*, which can be either acquired or congenital. The acquired one has an early and a late stage, the latter being divided into three separate stages with different characteristics, the secondary stage being known as the great imitator because of the polymorphism of the lesions. The classification is based on the clinical appearance, the chancre and satelite adenopathy representing the primary syphilis (PS). Rarely, PS can present as circinate balanitis (balanitis syphilitica of Follmann). PS presenting as primary chancre associated with Follmann balanitis was also described. Secondary syphilis (SS), also known as the „great imitator" is characterized by the the polymorphism of the skin lesions and diffuse general symptoms like headache, muscle and bone pain, nonspecific laboratory changes like pancitopenia, increased liver function tests, increased Erythrocyte Sedimentation Rate (ESR) and so on. Depending on the personal history and immunity of the patient, there may be overlapping of the stages. From 2010, a significant raise of *T. pallidum* infection rate has been observed in patients over 45 years old, especially in homosexuals and/or HIV infected patients []. In 63% of the reported cases men sex men (MSM) were involved. In this particular group, the diagnosis and staging is more difficult, from frequent unsual locations of the primary chancre (e.g. anal or oral mucosa) to completely atypical clinical picture in HIV coinfection. Also, the lack of the primary chancre in intravenous drug user (syphilis d'emblée) can raise diagnosis difficulties. In primary syphilis, the earliest lesion appears within an innoculation period of one to three weeks, as a consequence of local contact with the bacteria. Clinically, the first change is a pink papule which expands and turns into a chancre accompanied by local lympadenopathy at the same side. Practically, the chancre represent a granulomatous reaction as a defense mechanism, the plasma cells cover the bacteria and try to stop the spreading of the infection via blood circulation. This defense mechanism is not enough, so without antibiotic treatment, this defense reaction will decrease and from a clinical point of view we assist at the disappearence of the primary chancre with blood invasion by treponemas. In SS, we have disseminated skin lesions as a consequence of bacteremia, usually within the first year of infection, but may reappear up into the second year after the initial infection. In early secondary syphilis the primary lesions may still be present. The polymorphism of the lesions depends on the degree of the skin immunity , the level of vascular involvement and the local ischemic changes that result from these processes [].

Case presentation

We present the case of a 44 year -old-male patient, affirmatively heterosexual, presented for asymptomatyc polymorphous skin and mucosal lesions. The patient interview was very diffucult, he cannot describe clearly the onset and evolution of the skin lesions and avoided to discuss about his sexual life. Clinical examination reveals pink macules on the abdominal flanks, a brick-red annular plaque on the abdominal area, purple-red nodules with peripheral descuamation on the back, scaling erythematous plaques on the scrotum, annular lesions with central atrophy onthe prepuce, greasy scale covered erythematous lesions on the scalp, neck and face, fair purple lesion with central palling in the both axilary regions. On the back, in lumbar area, we noted atrophyc scars and the patient does not recall any trauma hystory.We also noted microadenopathies and the patient complained for diffuse muscle pain. On examanination of the oral mucosa, on the hard palate we observed sharply delimated ulcerations. We do not noted residual lesions of primary chancre like indurated skin or hyperpigmentation neither on the genital or anal mucosa. Also, no persistent characteristic adenopathy for primary lesions was not found after a complete examination of all the accesable limh nodes areas. A complete urological examination does not revealed any

abnormalities. Laboratory examinations revealed TPHA 1:10240, VDRL 1:32, RPR positive on a 1:8 scale dilution,high levels of Ig M and Ig G anti-syphilis antibodies, negative anti HIV I+II antibodies, ESR-44 mm/h., increased liver function tests (GOT= 67 UI, GPT 78 UI). Based on the clinical and serological result, the diagnosis of secondary syphilis was established and treatment with Benzatin Penicilin was initiated, with remision of the lesions.

Discussion

Asymptomatic skin lesions, sometimes with strange aspect that cannot be included in common diseases, rise highly the suspicion of secondary syphilis. It is important to keep in mind the idea that the lesions can overlape in secondary syphilis [5]. In our case we observed residual roseolas, annular siphilides, psoriasiform lesions, sebborheic siphilides, ulcerations and nodules. Other lesions that are met rarely in SS are lichenoid, ectyma-like, follicular and acneiform papules, hypopigmented macules, intertriginous erythema, anetoderma [6-10]. Our patient presented also bilateral axillary erythema that cannot be included clearly in a specifiic type of intertrigo from a clinical point of view. More than that, this flexural lesions dissapear completelly after the first dose of benzatine penicillin. Based on patient diagnosis, literature reports and proper response to the antibiotic treatment, we considered the axillary lesions as a manifestation of SS. Regarding atrophic scars located on the lumbar area, even the does not recall any history of local trauma, we considered that is very difficult to include it as a stigma syphilis lesions because the patient cannot confirm the presence of previous skin lesions. Syphilis anetoderma is well described in the literature and usually result after the remission nodular lesions. In our patient we observed in the vicinity of the area a typical nodular lesion. A rare case of syphilis was reported with overlapping of primary and secondary stage, raising the possibility of a secondary superimposed infection, this theory being confirmed by Shwetz et al in an analysis of secondary syphilis lesions. They affirm that although secondary stage lesions appear 4-10 months after the primary lesion, in rare cases of disseminated lesion an overlapping of stages may be present. Sometimes primary chancre may still be present when the roseolas arise [11]. Our patients presented an overlap between precicious SS and late SS. Annular lesions are described in SS, especially located on the genital area and usually are missdiagnosed as annular lichen planus [12-14]. Our patient presented an annular lesion on the prepuce and also extragenital lesions. Skin nodules in SS are a mimicker of lymphocytoma or cutananeous lymphoma, sarcoidosis, and Kaposi sarcoma [15-22]. Psoriasis-like lesions are found especially on the scrotal area in men, our patient presented on the scotum, prepuce and knees. Seborrheic syphilides are diffucult to be suspected when they present as the only sign [23-27]. In our patient the suspicion was high because of the clinical and serological content. Oral manifestations in SS are consist usually in ulcerations, plagues or nodules [28-33]. Our patient presented unnoticed ulcerations with rapid remision after antibiotic treatment. Finally, only one case of bilateral axillary erythema as a menifestation of secondary syphilis was reported by Chantrapitak et al recently. We also consider this changes as SS lesions in our patient based on the epidemiological content, serology, proper response to the antibiotic treatment and why not based of the fact that this intertriginous axillary rash cannot be corelated with other cause, bacteriological and micological culture were negative. Anyway, more data are necesarry to be reported for a clear corelation between SS and flexural erythema.

Conclusion

Atypical polymorphous skin eruptions impose serological testing for syphilis. Cases of SS must be analized properly according to the overlap of the stages, lesional polimorphism, different stages of different lesions.

Figure 1. Patients at the first examination
a) Annular plague on the anterior trunk; b) Red nodule on the lumbar area. Note also atrophic scars in the vicinity; c) Psoriasiform plaques on the scrotum; d) Annular plaque on the prepuce; e) Red plaques on the anterior cervical area; f) Oral ulceration on the hard palate

Figure 2. Patients at the first examination
a) Atrophic scars on the lumbar area; b) Plague covered with fine scales on the knee; c) Plaque covered with yellowish scales on the scalp; d) Discrete red macules and patches on the lateral part of the trunk; e) Arciform plaque on the upper part of the back; f) Axillary rash with central clearing

Figure 3. a,b,c,d) Skin and mucosal lesion after the first dose of benzathin penicillin

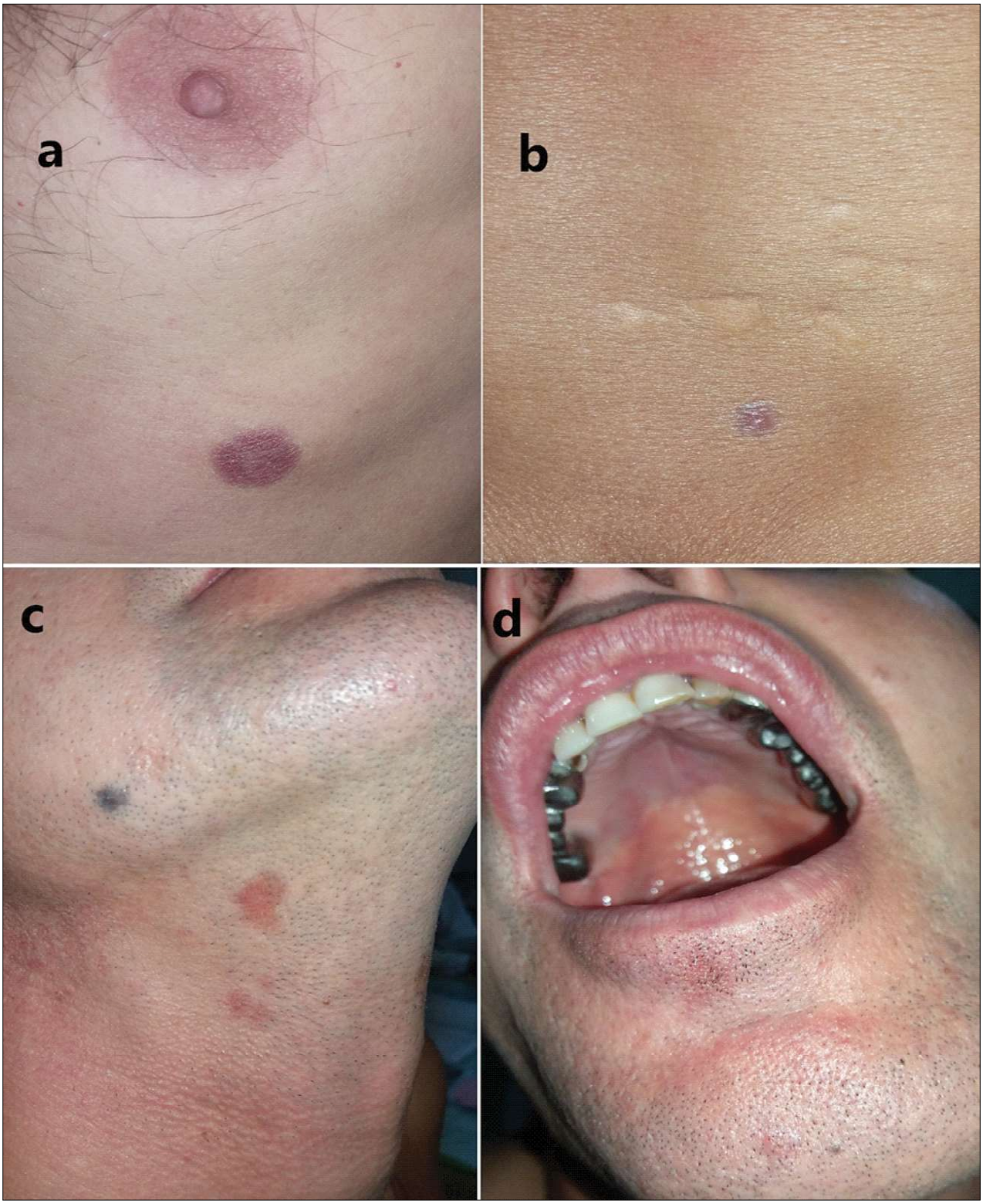

Figure 4. a,b,c,d) Skin and mucosal lesion after the second dose of benzathin penicillin

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Conflict of interest
NONE DECLARED

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