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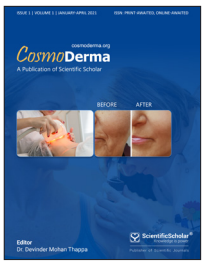

Letter to the Editor

Syphilitica roseola in a seropositive man

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Dear Sir,

Syphilis is a chronic infection that progresses over decades with alternating active clinical disease (primary, secondary, and tertiary stages) and asymptomatic periods (latency),[1] transmitted almost exclusively by sexual contact including oro-genital contact, through blood and blood products or vertically from an infected mother during pregnancy, birth or breastfeeding. Human immunodeficiency virus (HIV) is strongly associated with syphilis specifically in men who have sex with men (MSM) individuals without protection.

The secondary stage of syphilis presents with generalized manifestations on the skin and mucous membranes. Considered to be the most contagious stage, it manifests with a spectrum of symptoms such as malaise, low fever, lymph node enlargement, sore throat, headache, and muscle ache in addition to dermatologic manifestations.[2] Syphilitic roseola is one of the main symptoms of secondary syphilis also known as "the great imitator" consisting of 0.5–2 cm pink, discrete, round to oval macules. Papular and papulosquamous eruptions evolve from the macular lesions.[3] This letter revolves around a case of syphilitica roseola, a main cutaneous manifestation of secondary syphilis.

A 41-year-old patient living with HIV/acquired immunodeficiency syndrome came with complaints of reddish raised lesions over the face, trunk, gluteal, and extremities for the past two weeks with minimal itching. Asymptomatic for two weeks, patient developed multiple, discrete, few blanchable, erythematous papules and few plaques over the trunk, gluteal, bilateral forearms, thighs, and lower legs, which progressed to involve the neck [Figure 1a and b]. Palms and soles had multiple hyperpigmented macules and papules with areas of exfoliation showing positive Buschke-Ollendorff sign [Figure 2]. The oral cavity comprised ill-defined whitish plaques over right buccal mucosa.

He has been a known case of type 2 diabetic on anti-retroviral therapy for the past three years with a tenofovir-lamivudine-efavirenz regimen in the first year and tenofovir disoproxil fumarate-lamivudine-dolutegravir from the second year. The CD4 count and viral load were done regularly, which showed 450 counts and no target for viral load, respectively.

The patient had many extramarital homosexual affairs since 2015, and the contact being known persons, unpaid, and peno-oral and -anal route in an unprotected manner. The last contact was a month ago.

On further routine and serological investigations, treponema pallidum hemagglutination assay (TPHA) and rapid plasma reagin test were reactive with histopathological examination showing a dense infiltrate in the dermis containing many plasma cells [Figure 3]. He was treated with benzathine penicillin IM 2.4M IU stat, observed for 24 h, and discharged with symptomatic treatment. The lesions appeared flattening without post-inflammatory hyperpigmentation after 30 days from the day of injection [Figure 4a and b].

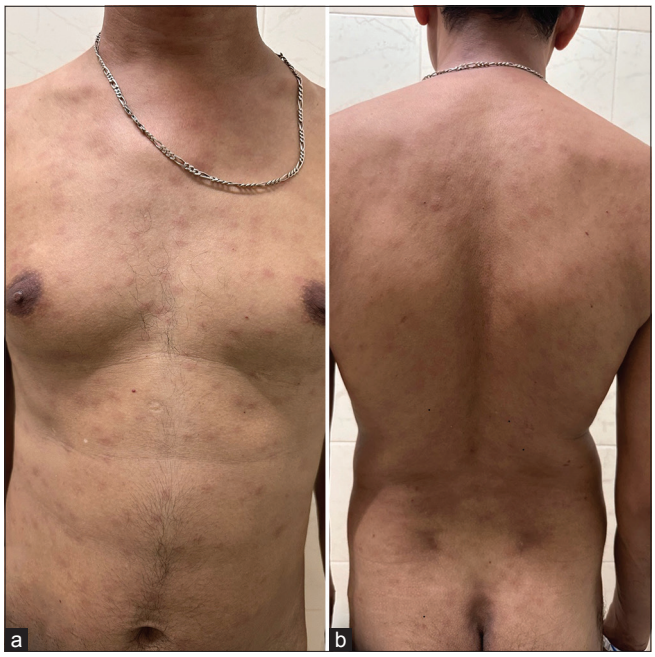

Figure 1: (a and b) Multiple, blanchable, and erythematous papules and few plaques over trunk.

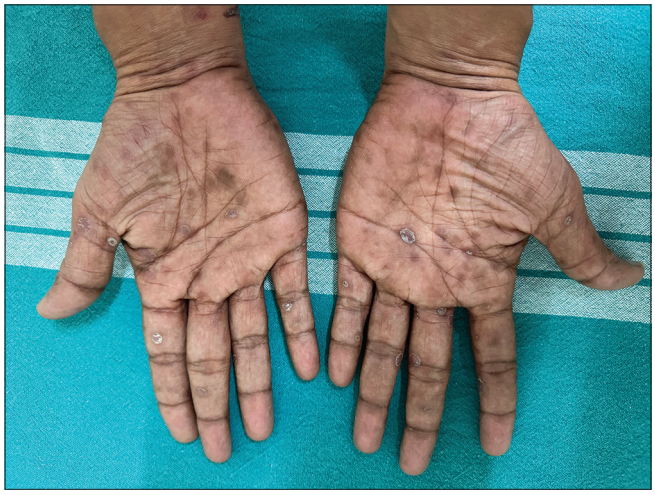

Figure 2: Multiple, hyperpigmented papules few with scaling and macules over both palms.

The diagnosis was made based on the history, physical examination, and laboratory investigations, which include non-treponemal (Rapid Plasma Reagin and Venereal Disease Research Laboratory) and treponemal (Treponemal Pallidum Particle Agglutination and TPHA) tests. The presumptive diagnosis is based on typical rash and reactive non-treponemal tests with a titer more than 1:8. Reactivity in both these non-treponemal and treponemal tests is confirmatory. Treponemes identified by dark field microscopy from the lesions or polymerase chain reaction are also confirmatory.[4]

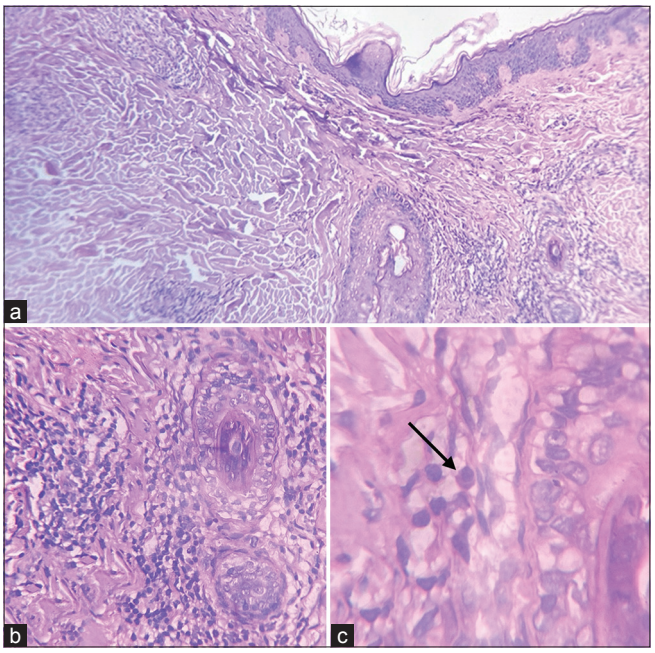

Figure 3: H&E staining: (a and b) 100 and 400 magnifications, respectively, shows dense infiltrate of plasma cells and lymphocytes. (c) Black arrow shows a single plasma cell.

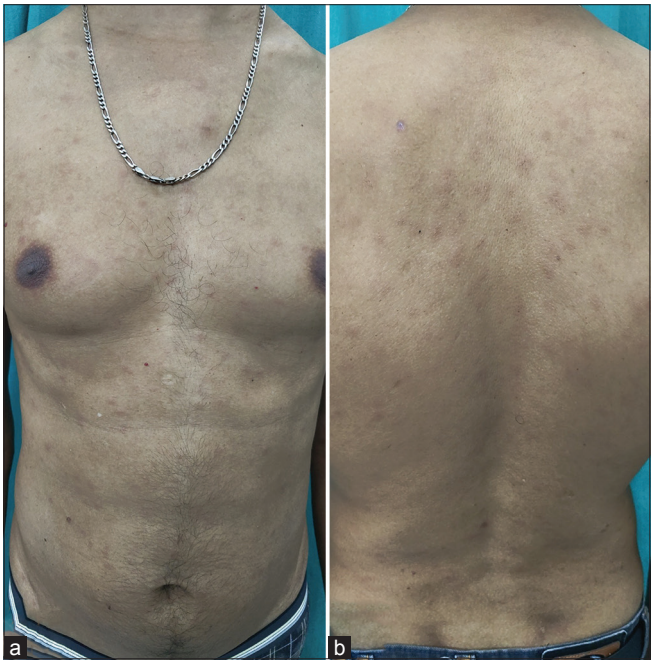

Figure 4: (a and b) Lesions resolving and reduced in number at review after four weeks of treatment.

Although serological methods are the confirmatory tools for diagnosis, skin biopsies are often done to control possible false-positive and -negative results.[5] Intramuscular benzathine penicillin 2.4 million IU intramuscularly as a single dose or

aqueous procaine penicillin 600,000 units/day for 10 days is the recommended treatment. Oral doxycycline 100 mg twice daily is used as an alternative in patients with penicillin allergy. A high index of suspicion must be maintained, especially in the vulnerable group of people such as MSM and seropositive individuals to avoid misinterpretation. The treatment may be troublesome due to its multiple morphologies, hence requiring interpretation of laboratory investigations.

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Ethical approval

The Institutional Review Board approval is not required.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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