# Coexisting primary and secondary syphilis in an immunocompetent individual

Sir,

Syphilis is an ancient and well-known sexually transmitted disease, caused by *Treponema pallidum,* and the prevalence rate has been in the increasing trend nowadays. It passes through 4 phases through primary, secondary, latent, and tertiary stages. The primary stage which occurs after an incubation period of 9–90 days is an inoculation of treponemal spirochetes at the site of breach in the genital or extragenital skin and mucosa. After a period of 6–8 weeks, it manifests with diverse mucocutaneous lesions ranging from macular, papular, papulosquamous to pustular lesions.

A 32-year-old promiscuous male presented to our outpatient department with multiple ulcers over the scrotal region for the past 2 months. He was bisexually oriented and had multiple female and male partners. The last sexual act was unprotected with a male, 2 weeks back. He was a passive partner and admitted the practice of coitus interfemoris also.

On examination, there were multiple, painless, hard, and indurated ulcers of varying sizes over the scrotum and ventral aspect of the penis [Figure 1]. There was a single nonindurated ulcer of size 0.5 cm × 0.5 cm in the left side of the scrotum [Figure 2]. There was an annular plaque of size 3 cm × 3 cm among these ulcers in the right side of the scrotum [Figure 3]. There was bilateral, painless, and firm inguinal lymphadenopathy. Cervical and axillary nodes were also palpable. Other areas including the oral cavity, anal and perianal areas, palms, and soles were normal.

Dark field microscopy was done from the exudate over the indurated and nonindurated ulcers and *T. pallidum* was demonstrated. Grams stain and Tzanck smears were negative. The rapid plasma reagin was reactive in 1:256 dilution and confirmed by treponema pallidum hemagglutination which also turned to be reactive. Serology for herpes simplex virus and human immunodeficiency virus 1 and 2 statuses were nonreactive.

A final diagnosis of annular syphilide with persistent chancre and chancriform ulcer of secondary syphilis was made and the patient was treated with a single dose of injection benzathine penicillin 2.4 million units and he was under regular follow-up. Partner tracing could not be done as there were multiple partners. The patient returned after 1 month and all lesions had completely resolved.

Syphilitic chancre signifies the local tissue reaction and the regional lymph nodes become enlarged within a week of the appearance of the chancre. In 40% of individuals, multiple chancre can occur due to autoinoculation.[1-3] This could be a reason for multiple chancres in the scrotum as seen in our case. It has an indolent course and heals spontaneously, if untreated, within 3 to 10 weeks leaving a thin and atrophic scar.

The interval between the appearance of chancre and the onset of secondary manifestations is highly variable and ranges from 6 to 8 weeks. In about a third of the cases, chancre can still persists.[4] However, only few cases of co-occurrence of the primary and the secondary syphilis

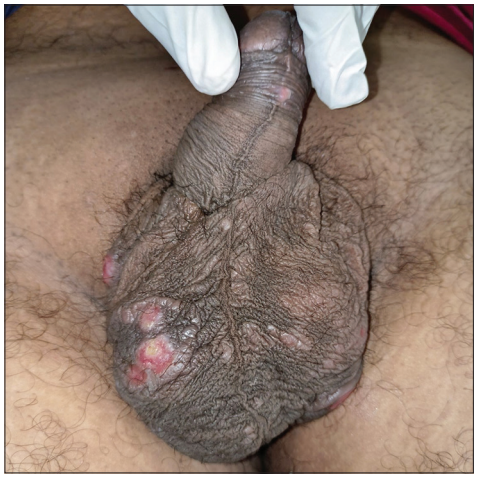

**Figure 1:** Multiple, painless, hard, and indurated ulcers of varying sizes over the scrotum and ventral aspect of the penis

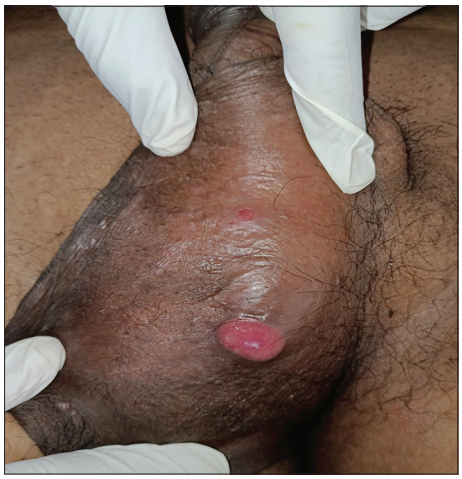

**Figure 2:** Chancriform ulcer seen at the left side of the scrotum

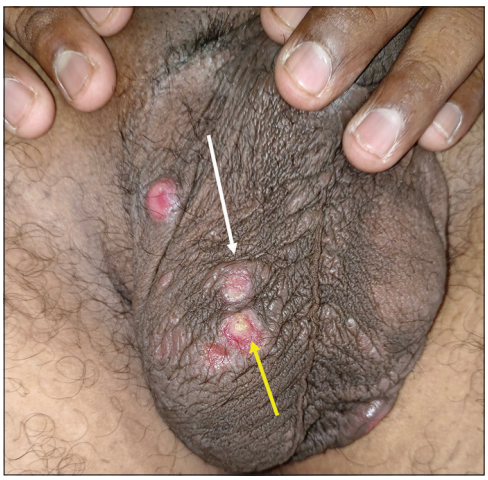

**Figure 3:** Annular syphilide (white arrow) and few chancres seen within the annular plaque (yellow arrow) in the scrotum

are documented. A more rapid dissemination into the bloodstream has been proposed as a probable cause.[5]

One-fourth of HIV-infected persons can present with concomitant lesions of both primary and secondary syphilis at the time of diagnosis.[6] It has been postulated that this occurs because rapid progression of the disease.[5] Though rarely, the synchronous presentation can occur in non HIV individual also.

The common skin manifestation of secondary syphilis is papulosquamous eruptions which occurs over the trunk and extremities including palms and soles. In about 29.6% of cases, atypical manifestations are reported to occur.[7] They include annular, nodular, nodular-ulcerative, berry-like, corymbiform, photosensitive systemic lupus erythematosus-like, lues maligna, leukoderma, and chancriform presentations.

Chancriform ulcers are a dark field positive lesion resembling the primary chancre seen in patients with secondary syphilis. However, there was no mention of this condition in past literature. There was a case report of chancriform ulcer at the extragenital site by Murugan *et al*.[8]

Annular syphilis is less commonly reported and the prevalence rate is approximately 5.7%–13.6%.[9,10] It occurs in children and dark-skinned people, and mainly located on the face and cheeks, often close to the angle of the mouth. In rare instances, it can be seen over the penis, feet, and legs.

In previous case reports of synchronous presentation of chancre and secondary syphilis, there is involvement of palms and soles.[11,12] However, in our case, there is no such involvement.

Our case is quite interesting because there is coexistence of the multiple primary chancre along with annular syphilide in the scrotum and some of these chancres were seen within the annular lesion.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

A. S. Krishnaram, C. K. Sriram
Department of Dermatology, Venereology and Leprology, Velammal Medical College Hospital and Research Institute, Madurai, Tamil Nadu, India

**Address for correspondence:**
Dr. C. K. Sriram,
Department of Dermatology, Venereology and Leprology, Velammal Medical College Hospital and Research Institute, Madurai–Tuticorin Ring Road, Anuppanadi, Madurai - 625 009, Tamil Nadu, India.
E-mail: cksriram49@gmail.com

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