Dermoscopy of Circinate Balanitis

Avik Panigrahi, Surajit Kumar Biswas, Abheek Sil

Department of Dermatology, Venereology, and Leprosy, R.G. Kar Medical College, Kolkata, West Bengal, India

A 26-year-old heterosexual male having high risk sexual behavior presented with a 3-week history of asymptomatic genital lesions and low back pain. About 1.5 months ago, he had an episode of dysuria along with urethral discharge that was treated with oral antibiotics. He denied any other systemic symptom or application of any topical medication. Examination revealed multiple well-demarcated erythematous annular and polycyclic plaques over the glans penis [Figure 1]. Dermoscopy (DermLite DL4, contact/polarized, 10x) showed areas of confluent regular red dotted vessels over an erythematous background and surrounded by coalescing whitish pustules arranged in an annular and polycyclic pattern [Figure 2]. He tested positive for HLA-B27; serological markers for human immunodeficiency virus, herpes simplex, syphilis, and rheumatoid arthritis were negative. X-ray of pelvis demonstrated sacroiliitis. The patient refused consent to undergo biopsy for histopathological examination. Based on the clinico-dermoscopic and radiological findings, a diagnosis of circinate balanitis in sexually acquired reactive arthritis (SARA) was made. The genital lesions subsided in a fortnight with topical corticosteroids.

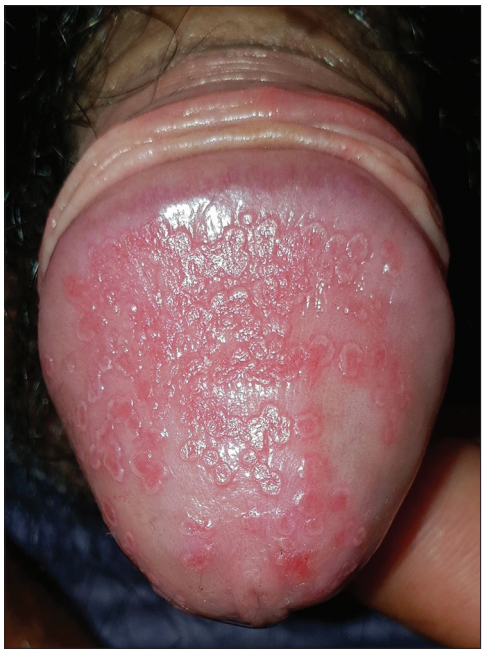

Figure 1: Multiple well-demarcated erythematous annular and polycyclic plaques over the glans penis

Circinate balanitis is characterized by annular erythematous erosive plaques with polycyclic margins involving the glans penis and prepuce. It is the commonest mucocutaneous presentation of SARA, a HLA-B27 associated rheumatologic condition that is usually preceded by chlamydial urethritis. It can present either independently or with other mucocutaneous features of SARA.[1] In our case, the representative dermoscopic findings of annular and polycyclic pustules, dotted vessels, and erythematous background can be correlated with histopathological findings of dense dermal neutrophilic infiltrates, tips of increased number of papillary dermal capillaries, and upper

Figure 2: Dermoscopy (DermLite DL4, 10x, contact/polarized mode) showing areas of confluent regular red dotted vessels (black arrow) over an erythematous background (black circle) surrounded by coalescing whitish pustules arranged in an annular and polycyclic pattern (yellow arrow)

How to cite this article: Panigrahi A, Biswas SK, Sil A. Dermoscopy of circinate balanitis. Indian Dermatol Online J 2021;12:488-9.

Received: 11-Sep-2020. **Revised:** 24-Oct-2020. **Accepted:** 14-Dec-2020. **Published:** 12-May-2021.

Address for correspondence:
Dr. Avik Panigrahi, Department of Dermatology, Venereology, and Leprosy, R.G. Kar Medical College, 1, Khudiram Bose Sarani, Kolkata - 700 004, West Bengal, India.
E-mail: avik843@gmail.com

Access this article online

Website: www.idoj.in

DOI: 10.4103/idoj.IDOJ_738_20

Quick Response Code:

dermal capillary dilatation, respectively.[2] The use of a non-invasive tool like a dermoscope can aide in differentiating circinate balanitis from its mimickers, including annular lichen planus (hairpin-like vessels and annular Wickham's striae which correspond to focal hypergranulosis) and pustular psoriasis (crusts, yellow globules with dotted vessels correspond to hyperkeratosis, epidermal neutrophilic microabscess, and papillary dermal dilated vessels). Topical corticosteroids or calcineurin inhibitors are helpful in treating this condition.[3] Early identification of the condition and prompt referral to a rheumatologist is essential to avoid serious complications associated with SARA.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Carney R, Buhary T, Teh LS, Gayed S. Circinate balanitis as the presenting symptom of sexually-acquired reactive arthritis: A case report. Br J Gen Pract 2015;65:266-7.
2. Errichetti E, Lallas A, Di Stefani A, Apalla Z, Kyrgidis A, Lacarrubba F, *et al*. Accuracy of dermoscopy in distinguishing erythroplasia of Queyrat from common forms of chronic balanitis: Results from a multicentric observational study. J Eur Acad Dermatol Venereol 2019;33:966-72.
3. Kumar S, Mahajan BB, Ahluwalia RS, Boparai AS. Reiter's disease: Circinate balanitis as a lone preceding presentation - Successfully treated with pimecrolimus 1% cream. Indian J Sex Transm Dis AIDS 2015;36:70-3.