Atypical Adult-Onset Pityriasis Rubra Pilaris in an HIV-Positive Adult Male

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Indian J Dermatol 2018;63(6):522-4

Sir,

A 30-year-old unmarried male presented to skin outpatient department with lesions over the body for 5 months with no history of any drug or food allergies, joint pain, and fever or photoaggravation. The patient had a history of sexual exposure, several times, with a known female partner. Cutaneous examination revealed multiple, well-defined, reddish-orange plaques with multiple follicular hyperkeratotic papules over upper limbs, knees, and trunk with islands of normal skin within the lesions [Figures 1a-e]. All the fingernails had multiple irregular pits. The scalp, oral cavity, and genitals were normal. He was treated as a case of psoriasis by a private practitioner with tablet methotrexate 7.5 mg/week for 2 months.

All routine investigations were normal. Serology testing for HIV 1 and 2 was positive by enzyme-linked immunosorbent assay. Skin biopsy revealed moderate acanthosis, short and broadened rete ridges, moderate spongiosis with alternate layers of parakeratosis and orthokeratosis, and thick suprapapillary plates. Superficial dermis showed orthokeratotic plug and mild perivascular lymphoplasmacytic inflammatory infiltrate [Figure 2]. Changes were suggestive of pityriasis rubra pilaris (PRP). The patient was started on antiretroviral drugs following which there was improvement in the lesions.

PRP is a papulosquamous disorder of unknown etiology which progresses to erythroderma with keratoderma of the palms and soles. The disease was originally classified by Griffiths into five groups. A sixth group was then introduced to accommodate those with HIV infection, which appears to differ from the classic forms.¹
PRP Type 6 is characterized by the presence of HIV infection, usually without evidence of immunosuppression, a poor prognosis, a poor response to etretinate, and variable association with lesions of acne conglobata, hidradenitis suppurativa, and lichen spinulosus.\textsuperscript{[2]}

It commonly affects young homo- or heterosexual males. The pathogenesis of PRP may be related to abnormal immune response to antigenic triggers, that is, HIV and follicular inflammation caused by infection of the hair bulge region by HIV. Vitamin A deficiency, deficiency of retinol-binding protein, and genetic factor can also be the cause.\textsuperscript{[3]}

There is no single diagnostic laboratory test or genetic marker for the diagnosis of PRP. It can be diagnosed on a clinical suspicion and dermatopathological correlation as seen in our patient. The disease can be designated by the wider term HIV-associated follicular syndrome or HIV-associated follicular occlusion triad, as nodulocystic folliculitis sets this disorder apart from classic PRP.\textsuperscript{[4]}

Cases of PRP in association with HIV have been reported.\textsuperscript{[3,5,6]} In the documented cases, the onset of PRP occurred shortly after or at the same time when the patients tested positive for HIV infection. In our case, HIV infection was a retrospective diagnosis. Neither the patient knew about his HIV status nor it was clear to the clinician as to whether there was immunosuppression before the onset of the lesions or it developed following the development of the lesions which could be accidental. Acne conglobata and hidradenitis suppurativa which used to be present with HIV-associated PRP were absent in our patient.

The main line of treatment for Type 6 PRP is antiretroviral drugs, which cause alleviation of the symptoms and may even cause complete regression in many patients,\textsuperscript{[6]} as was seen in our patient after 3 months.

**Acknowledgment**

We would like to acknowledge the Department of Pathology, Pramukhsami Medical College for the diagnosis and photograph of the slide.

**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.
Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

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Access this article online
Quick Response Code:
Website: www.e-ijd.org
DOI: 10.4103ijd.IJD_141_18

How to cite this article: Nair PA, Sheth N. Atypical adult-onset pityriasis rubra pilaris in an HIV-positive adult male. Indian J Dermatol 2018;63:522-4.
Received: March, 2018. Accepted: August, 2018.