

Pustular psoriasis masquerading linear naevoid psoriasis: A case report

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Abstract Linear psoriasis is a rare form of psoriasis characterised by linear array of lesions involving particular dermatome or along the Blaschko lines. It may arise *de novo* or as a part of Koebner phenomenon with other psoriatic lesions. It may resemble clinically to inflammatory linear verrucous epidermal naevus (ILVEN). Hereby we report case of a 39-year-old male who initially presented with generalised pustular psoriasis but after treatment it emerged with linear verrucous papules resembling ILVEN and histologically with features of psoriasis.

Key words

Linear psoriasis, ILVEN, Blaschko lines

Introduction

Linear psoriasis is an atypical form of psoriasis that often arises with chronic plaque type lesions elsewhere in the body.¹ It is very rare and even rare to turn into pustular psoriasis. Differentiating it from other linear dermatoses is the key. There have been very few reports of linear psoriasis presenting in pustular form. We report the first case of pustular linear psoriasis from Jharkhand.

Case Report

A 39-year-old male presented with 1 month history of erythroderma with pustules all over the body. Examination revealed multiple pustules over erythematous base covering almost whole body with 'lakes of pus' (**Figure 1**). The patient was febrile and had a toxic look. He gave a history of sudden withdrawal of steroids a week back. Clinically we diagnosed it as generalised pustular psoriasis. We started him on i.v fluids and i.v antibiotics

and bland emollients. His general condition improved in 3 days and after confirming that his complete blood count, liver function tests and renal function tests to be within normal limits, we put him on oral azathioprine 100mg for 40 days. The lesions decreased and erythroderma resolved. But the lesions localised to inner aspects of both forearms, axillae, chest, and face. The morphology changed from pustules to verrucous scaly papules distributed linearly in the above mentioned sites (**Figure 2 and 3**). We stopped azathioprine and started him on i.m. methotrexate 30mg/week for 4 weeks. But the lesions did not subside and remained resistant. Finally punch biopsy was sent for histopathological examination which showed moderately dense superficial perivascular lymphocytic infiltrate with papillary dermal hyperplasia. Epidermis showed marked psoriasiform hyperplasia, focal hypergranulosis, compact hyperkeratosis with foci of broad parakeratosis (**Figure 4, 5**).

In spite of antipsoriatic treatment, the lesions did not subside. Finally we started him on oral acitretin 100mg/day and topical clobetasol-salicylic acid after which the lesions gradually decreased.

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Figure 1 Erythroderma with generalized pustular eruption and lakes of pus.



Figure 2 Verrucous scaly papules distributed linearly on left side of chest, axilla and inner arm.



Figure 3 Verrucous scaly papules on medial aspect of arm and forearm.



Figure 4 Marked psoriasiform epidermal hyperplasia, papillomatosis and perivascular infiltrate.

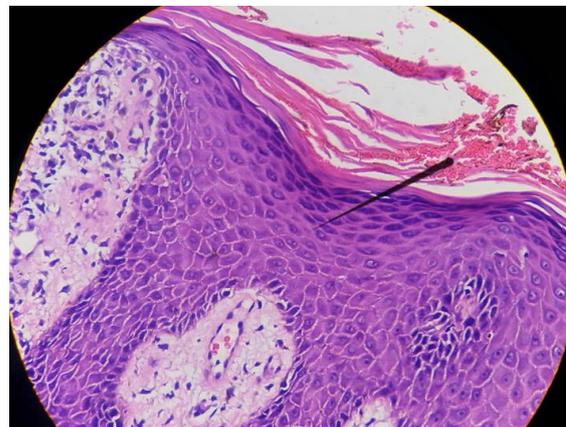


Figure 5, focal hypergranulosis, compact hyperkeratosis with foci of broad parakeratosis.

Discussion

Some consider linear psoriasis to be either synonymous with inflammatory linear verrucous epidermal nevus (ILVEN) or an invasion of pre-existing epidermal nevus by psoriasis due to koebnerisation.^{3,4} In our case the lesions clinically looked like ILVEN but

histopathology was consistent with psoriasis. Even linear psoriasis can present as pustular form as in this case. The differentiation of linear psoriasis from other linear dermatoses is not easy. The combination of a complete history, careful skin examination, and histopathology are essential for making the correct diagnosis and insuring proper treatment.⁷ The main differential diagnosis is ILVEN, clinical and pathological criteria for which were described by Altman and Mehregan in 1971.⁶ In a study of 25 patients they defined the diagnostic criteria⁶ as: (i) early age of onset, (ii) female predominance, (iii) frequent involvement of the left lower extremity, (iv) substantial pruritus, (v) persistence of the lesions, and (vi) refractoriness to treatment. They described an inflammatory and psoriasiform appearance histopathologically, including areas of parakeratosis with loss of the granular cell layer and orthokeratosis with a prominent granular layer with a sharp demarcation. These features were absent in our patient so we ruled out ILVEN. Further clues supporting the diagnosis of psoriasis for this patient included the lack of pruritus, a good response to acetretin, and the histopathology which was consistent with psoriasis. Even the relatively rapid progression and widespread distribution of the lesions was more consistent with psoriasis rather than ILVEN.

In conclusion we believe that linear psoriasis is a distinct entity and can turn into pustular form and can mimic ILVEN.

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