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CASE REPORT

Verrucous Psoriasis- Atypical Variant of Psoriasis Vulgaris

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Abstract

Verrucous psoriasis is a rare variant of hypertrophic psoriasis, characterized by erythematous to hyperpigmented verrucous plaques, usually recalcitrant to treatment. Here we discuss a case of verrucous psoriasis which mimics various dermatological conditions like extensive verruca vulgaris, chromoblastomycosis, verrucous carcinoma, tuberculosis verrucosa cutis, elephantiasis nostras verrucosa. It might be associated with diabetic mellitus, lymphatic obstruction, vascular pathology, repeated trauma or immunosuppression. In my case, verrucous psoriasis is associated with chronic venous insufficiency with ulcer.

Key Words

Verrucous Psoriasis, Psoriasis Vulgaris

Introduction

Psoriasis is a chronic cutaneous immune mediated disease with increased epidermal turnover leading to excess epidermal proliferation. Psoriasis presents with several morphological variants. In addition to the typical psoriasis variants there are several atypical variants, which includes verrucous, rupioid, elephantine and ostraceous psoriasis, of which verrucous psoriasis morphologically presents as wart like lesions [1] and mostly affecting the legs. The lesion of verrucous psoriasis morphologically presents with hyperkeratotic confluent papules and plaques and histologically characterised by hyperkeratosis and finger like papillomatosis. [1] It is important to differentiate verrucous psoriasis from other verrucous conditions in dermatology, for appropriate management. Verrucous psoriasis is very difficult to treat and it is recalcitrant. In our case methotrexate and acitretin are been used cautiously, as both the drugs damages the liver and so prevention of transformation of psoriasis vulgaris to verrucous psoriasis is essential. Treatment of underlying pathology priorly helps in preventing this transformation.

Case Report

A 57-year-old male presented with complaints of mildly pruritic cutaneous lesion involving bilateral lower limb and elbows for the past 6 months. The condition continues to increase in severity in both the lower limb over the past six months. He was diagnosed with psoriasis vulgaris 10 years back.He was on Ayurveda and allopathic treatment on and off, and then left untreated for the last one year.

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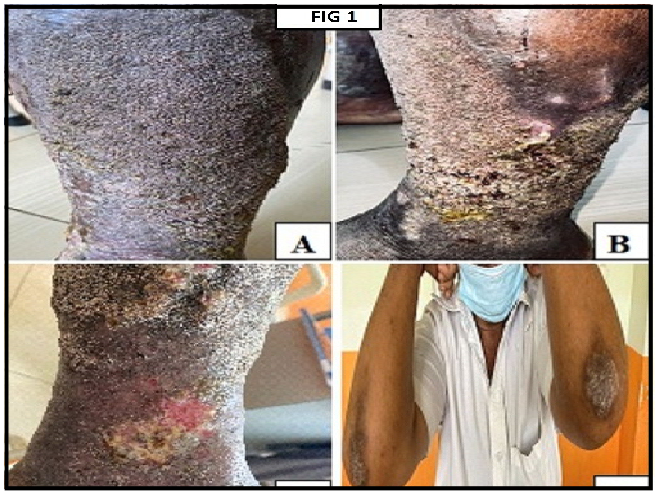

Figure 1: A) B) Hypertrophic Verrucous Adherent Plaques Over Bilateral Lower Limb.
C) stasis ulcer on the medial malleoli of leg.
D) Silvery white scaly plaque over both elbows.

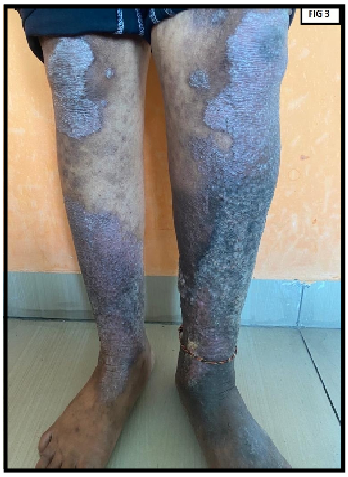

Fig 3. Resolution after 8 weeks

He had history of chronic venous insufficiency with varicose leg ulcer for 3 years. He is a security guard by occupation. Dermatologic examination showed hypertrophic verrucous adherent plaques over bilateral lower limb with diffuse hyperpigmentation noted around the medial malleoli bilaterally {*fig 1 (A,B)*}. A single ulcer of size 3x5 cm was present on the medial malleoli of left leg with surrounding eczematous changes and hyperpigmentation {*fig 1(C)*}. Few silvery white scaly plaques were present over the bilateral elbow region {*fig 1(D)*}. Skin biopsy taken from the left lower limb showed hyperkeratosis, focal parakeratosis, hypogranulosis, papillomatosis, acanthotic squamous epithelium with focal collection of neutrophils. The superficial dermis shows mild perivascular lymphocytic infiltrate *{fig 2}*. Fungal culture did not reveal the presence of any fungal elements.

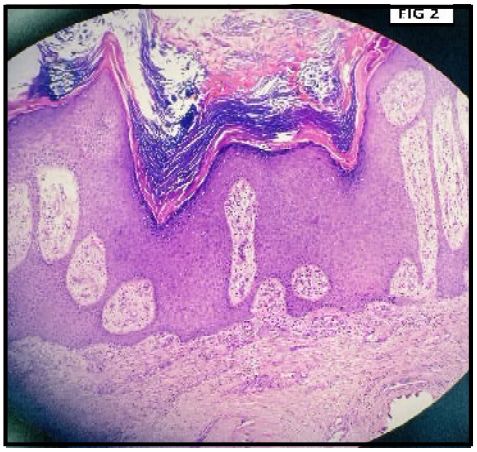

Fig 2. Hyperkeratosis, Focal Parakeratosis, Hypogranulosis, Papillomatosis, Acanthotic Squamous Epithelium with Focal Collection of Neutrophils.

Discussion

Verrucous psoriasis is a distinctive clinicopathologoical variant of psoriasis characterised by epidermal hyperproliferation associated with localised immune dysregulation. It is characterised by hypertrophic verrucous plaques over an erythematous base and may involve the legs, arms, trunk, and dorsal aspect of the hands. The lesions may be foul-smelling. [2]

Histopathologically, overlapping features of verruca vulgaris and psoriasis have been described. Specifically, lesions display typical psoriasiform changes, including parakeratosis, epidermal acanthosis with elongation of rete ridges, suprapapillary thinning, epidermal hypogranulosis, dilated or tortuous capillaries, and neutrophil collections in the stratum corneum (Munro microabscesses) or stratum spinosum (spongiform pustules of Kogoj) . [3] Additional findings of papillomatosis

and epithelial buttressing are highly suggestive of verrucous psoriasis. [3]

When diagnosing verrucous psoriasis clinicopathologically, it will be advantageous to consider other differentials such as verruca vulgaris, chromoblastomycosis, verrucous carcinoma, hypertrophic lichen planus, tuberculosis verrucosa cutis and elephantiasis nostras verrucose. [4]

Treatment of verrucous psoriasis can be difficult and recalcitrant because hypertrophic nature. There is no optimal treatment for verrucous psoriasis. Combination therapy may be useful. Topical steroids, kerotolytic agents, calcipotriol along with intralesional steroid therapy along with systemic therapy with methotrexate, azitretin or etretinate can be given. Biologicals have also been tried. [5]

In our patient, the localised immune response is triggered by chronic venous insufficiency with leg ulcer. We started him on methotrexate 12.5mg weekly intramuscular injection along with acitretin 25mg daily, after performing baseline investigations. Topical high potent steroid with keratolytic agent was given along with systemic therapy. Patients showed improvement after 8 weeks of therapy {*fig 3*}. Periodic general examination and blood parameters such as complete blood count, liver function test, renal function test, fasting lipid profile were done regularly to combat the adverse effects. Patient was treated for chronic venous insufficiency as per vascular surgeon's advice and patient was followed up.

Conclusion

Verrucous psoriasis is a rare variant of psoriasis that might prompt consideration of other verrucous lesions in dermatology. Combination of clinical and histopathological findings is required for precise diagnosis. In our case likely factor contributing for the development of verrucous psoriasis is chronic venous insufficiency with ulcer and neglected treatment. If patient had followed necessary treatment for chronic venous insufficiency, it might have prevented the occurrence and recurrence of verrucous psoriasis.

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