ORIGINAL RESEARCH PAPER

Dermatology

HYPERTROPHIC LICHEN PLANUS MASQUERADING AS CUTANEOUS TUBERCULOSIS: - A CASE REPORT

KEY WORDS: Hypertrophic lichen planus, tuberculosis verrucosa cutis (Tbvc)

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ABSTRACT

Hypertrophic lichen planus is a chronic variant of lichen planus which presents as hypertrophic and warty lesions seen over the pretibial area of the lower limbs. We report a case of a 15-year-old boy with hypertrophic lichen planus which resembled as verrucous tuberculosis

INTRODUCTION:

Lichen planus (LP) is an idiopathic inflammatory skin disease with involvement of oral mucosa. It has a chronic course. Hypertrophic lichen planus is a chronic variant of lichen planus which presents as hypertrophic and warty lesions seen over the pretibial area of the lower limbs. Clinically it has to be differentiated from other warty lesions like Tbvc, lichen simplex chronicus, lichen amyloidosis etc. Here we report a case of hypertrophic lichen planus with was clinically diagnosed as tbvc.

CASE REPORT:

A 15 years old male patient came with complaints of raised dark skin lesions over the right leg for the past 5 years. The patient was apparently normal 5 years back after which he noticed a small papule over right leg which progressively increased in size associated with itching. History of loss of weight was present. No personal or family history of tuberculosis.

On examination, a verrucous pigmented plaque of size 2x2cm is seen over the right leg few centimeters above the lateral malleolus. Center of the plaque is depressed and atrophic. No oral lesions were noted. Clinically the diagnosis of Tbvc was made.

Mantoux test was negative Biopsy has been taken and features were consistent with hypertrophic lichen planus.

DISCUSSION:

Lichen planus is a rare, immune, inflammatory tissue reaction with characteristic clinical and histological lesions. The disease is described by the presence of the six "P's": plain top, purple, polygonal, pruritic, papules and plaques. Hypertrophic lichen planus is less common. Hypertrophic LP is a chronic, hypertrophic form of the disease with severe epidermal hyperplasia and itching. Lesions usually heal with scarring, hypo-or hyper pigmentation.

There are several hypotheses on the etiopathogenesis of lichen planus[1]: metabolic theory (decreased enzyme activities in the epidermis), neurogenic and psychogenic theory (zosteriform pattern, association with paravertebral tumors and emotional stress, especially in emotionally labile persons), and autoimmune theory[2, 3]. Viruses, bacteria, hormones, metal ions, drugs and physical factors are considered to be potential triggers. Cellular components of the immune system induce epidermal reactions, injury to basal keratinocytes, and secondary inflammatory reactions. In lichen planus lesions, CD8 + T cells infiltrate the epidermis while T cells, both CD4 + and CD8 +, accumulate in the dermis. It has been suggested that CD8+ cytotoxic T cells recognize an antigen that is associated with the major histocompatibility complex (MHC) class I on lesional keratinocytes and lyses them[4].

The histology shows a characteristic "saw-tooth" pattern of epidermal hyperplasia; hyperkeratosis with thickening of the granular cell layer; and vacuolar alteration of the basal layer of the epidermis, with an inflammatory infiltrate at the dermal-epidermal junction.

Differential diagnosis of various forms of LP includes several conditions (lichenoid eruptions induced by drugs, eczematous eruptions with lichenification from scratching, lichen amyloidosis), whereas in hypertrophic lichen planus, chronic lichen simplex must be excluded. Other differential diagnoses include graft versus host disease, lichen nitidus, psoriasis, cutaneous TB, tinea corporis.

Treatment modalities include general measure like rest, dressings, topical steroids (mild or potent), retinoids, treatment of oral lesions and treatment of secondary or primary infections play a vital role. Topical calcineurin inhibitors, such as tacrolimus, pimecrolimus and cyclosporine are second-line therapies. Hypertrophic lesions are treated with intralesional corticosteroids. Systemic therapy with corticosteroids, cyclosporine, dapsone, retinoids (etretinate, acitretin, isotretinoin), and PUVA therapy have shown positive results. If necessary, surgical treatment is performed.

CONCLUSION:

Solitary hypertrophic lichen planus can be easily miss diagnosed as verrucous tb and vice versa. Hence individual presenting with warty lesion diagnosis of cutaneous tb must be excluded.

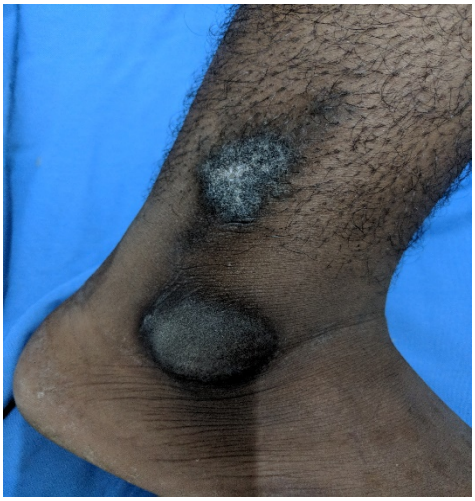

Figure 1: Clinical photograph showing pigmented verrucous plaque above the lateral malleolus

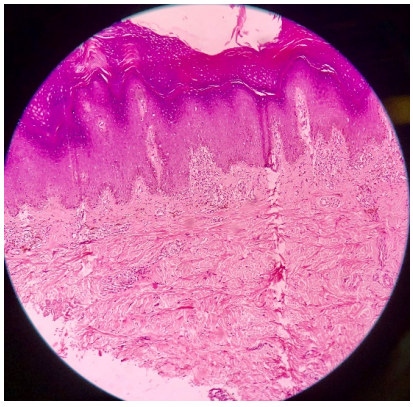

Figure 2: scanning view of microscope showing massive hyperkeratosis, thickening of the granular layer

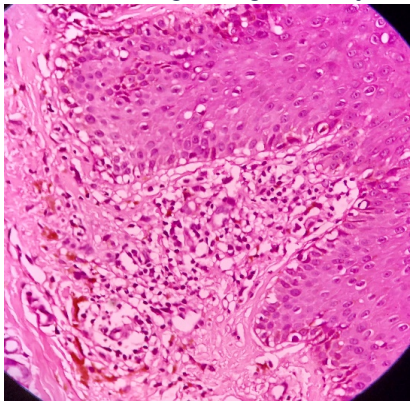

Figure 3: High power showing basal cell degeneration with dermal lymphocytic infiltrates close to the epidermis

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