

PALMOPLANTAR INVOLVEMENT IN LICHEN PLANUS

Meenakshi Patial*

Medical Officer [Specialist], Civil Hospital, Nadaun, Himachal Pradesh, India.

*Corresponding Author: Meenakshi Patial

Medical Officer [Specialist], Civil Hospital, Nadaun, Himachal Pradesh, India.

Article Received on 11/12/2022

Article Revised on 01/01/2023

Article Accepted on 22/01/2023

ABSTRACT

Lichen planus is an inflammatory disease that usually affects skin, hair, nails and mucous membranes. It presents as pruritic, violaceous papules and plaques, occurring most commonly on the wrists, lower back, and ankles. The majority of patients with cutaneous lesions spontaneously clear within 1 to 2 years after initial presentation. Involvement of the palms and soles is often misdiagnosed as it is uncommon and usually does not have typical morphological findings. The case discussed presented in the OPD with violaceous papules and plaques over limbs and penis and hyperkeratotic papules and plaques with central plug.

KEYWORDS: Hyperkeratosis, violaceous.

INTRODUCTION

Lichen planus is an inflammatory disorder of the skin and mucous membranes with an unknown cause. Its pathogenesis is not fully understood, but it appears to represent a T-cell-mediated autoimmune disease. Overall, women are more frequently affected than men at a ratio of 1.5:1, and most cases develop between the ages of 30 and 60.^[1] The most common presentation is polygon-shaped, itchy, violaceous, flat-topped papules. The lesions have fine white lines on the surface known as Wickham striae. The most common areas of involvement include the flexor surface of wrists, dorsum of hands, back, ankles, and shins. Lesions may heal with grayish-brown hyperpigmentation due to deposition of melanin in the superficial dermis.^[2] Various subtypes of LP exist that display patterns different from the classic presentation. Palmoplantar lichen planus is localized and uncommon and classically presents as pruritic, erythematous scaly papules and keratoderma-like papulonodules and plaques which is usually easily mistaken as callosities due to hyperkeratosis. Skin biopsy is valuable in confirming the diagnosis in atypical. Classical findings consist of hyperkeratosis without parakeratosis; irregular thickening of the stratum granulosum; alteration or loss of rete ridges resulting in a sawtooth appearance; and a dense band of lymphocytes infiltrating the dermis along the dermo-epidermal junction. Apoptotic keratinocytes are often seen near the basal layer which are known as colloid or Civatte bodies. Direct immunofluorescence may display colloid bodies with irregular deposits of IgA, IgM, IgG, or C3.^[3] For limited LP, first-line treatment is super potent topical steroids. Inadequate response to topical steroids may be augmented with intralesional steroid injections. For diffuse LP, first-line treatment is daily oral

corticosteroids. If no improvement is seen, second-line therapy should be considered including methotrexate, acitretin, sulfasalazine. Third line treatment may include trimethoprim-sulfamethoxazole, antimalarials, tetracyclines, ciclosporin, mycophenolate mofetil, azathioprine, etanercept, adalimumab.^[4]

CASE

The patient was a 46-year-old male presented with a pruritic violaceous papules coalescing to form plaques over the penis for 3-4 months [Figure 1]. Hyperkeratotic plaques with multiple pits were seen over both palms and soles [Figure 2 & 3]. Oral involvement was also there in the form of white, lacy lines on the bilateral buccal mucosa. Nails were not involved. Skin biopsy showed hyperkeratosis, hyper granulosus, acanthosis and melanin incontinence.



Figure 1: Violaceous papules coalescing to form plaques over the shaft of penis.



Figure 2: Hyperkeratotic plaques with multiple pits over palm and soles.

DISCUSSION

Palmoplantar LP is uncommon and presents with different morphology than the classical LP. The low incidence may in fact be due to missed diagnoses. Different morphological patterns of palmoplantar LP include erythematous scaly plaques, punctate keratoses, diffuse hyperkeratosis, ulcerated lesions, vesicular lesions, umbilicated papules, and diffuse hyperpigmentation of the palms and/or soles. Palmoplantar LP lesions, in contrast to classic LP lesions, do not have Wickham's striae (due to thick stratum lucidum of the palms and soles) and are not shiny. The differential diagnosis includes psoriasis, acquired palmoplantar keratoderma, verruca vulgaris, callus, xanthomas, syphilis, Kyrle disease, acrokeratosis paraneoplastica, punctate porokeratosis, lichen simplex chronicus, tinea pedis/tinea manuum, and eczematous hand dermatitis. Lesions on the palmoplantar areas in a patient with cutaneous and/or mucosal LP should prompt a biopsy for confirmation of diagnosis and appropriate management.^[5]

REFERENCES

1. Le Cleach L, Chosidow O. Clinical practice. Lichen planus. *N Engl J Med.*, Feb. 23, 2012; 366(8): 723-32.
2. Boyd AS, Neldner KH. Lichen planus. *J Am Acad Dermatol*, Oct, 1991; 25(4): 593-619.
3. Scully C, el-Kom M. Lichen planus: review and update on pathogenesis. *J Oral Pathol*, Jul, 1985; 14(6): 431-58.
4. Atzmony L, Reiter O, Hodak E, Gdalevich M, Mimouni D. Treatments for Cutaneous Lichen Planus: A Systematic Review and Meta-Analysis. *Am J Clin Dermatol*, Feb, 2016; 17(1): 11-22.
5. Sinha S, Sarkar R, Garg VK. Palmoplantar Lesions of Lichen Planus. *Indian J Dermatol*, Jan-Feb, 2018; 63(1): 57-61.