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# BULLOUS LICHEN PLANUS :A CASE REPORT ON THE UNCOMMON VARIANT

**Dermatology**

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## ABSTRACT

Bullous lichen planus is a rare and uncommon variant of lichen planus. The characteristic clinical feature of bullous lichen planus is bulla or vesicles over the previously existing lichen planus lesions or perilesional skin. The diagnosis is based on thorough history taking, clinical examination and histopathology examination. Bullous variant has to be differentiated from lichen planus pemphigoides and also other sub epidermal bullae diseases. Bullous lichen planus can be treated with topical steroids, oral steroids, oral dapsone , oral retinoids and immunosuppressive agents . Here we report a rare case of bullous variant of lichen planus in a young man with genital involvement.

## KEYWORDS

bullous lichen planus, lichen planus , sub epidermal bulla, steroids

## INTRODUCTION

Lichen planus is an idiopathic, chronic, inflammatory dermatoses of the skin , oral mucosa , genital mucosa and skin appendages. The characteristic clinical features of lichen planus are extremely pruritic, flat topped, polygonal, violaceous papules and plaques. Bullous lichen planus is one of the variants of lichen planus which is very uncommon. Bullous lichen planus has to be differentiated from lichen planus pemphigoides in which the latter usually has a chronic course and generalised blisters. Bullous lichen planus is an uncommon variant seen in the elderly. Here we report a rare case of bullous lichen planus in a young male.

## Case Report

A 26 year old male presented with intensely itchy skin lesions over the upper limbs, lower limbs, trunk and genital region for the past 2 months .The patient also presented with development of fluid filled lesions over few of the itchy skin lesions for the past 1 week. The patient also gives history of manipulation of few fluid filled skin lesions using safety pin. Patient denies any history of drug intake, topical application, fever or similar complaints in the past .

On examination, multiple discrete violaceous to hyperpigmented flat topped papules seen over the trunk, upper and lower limbs(Fig 1A,1B &1D) . Few papules coalesced to form plaques. Multiple tense bullae seen over the lesional skin on lower limb and umbilicus(Fig 1C&1F). Multiple erosions were also seen. Examination of genitals revealed whitish annular plaques on the ventral surface of penis and dorsal surface showed a single tense bulla on the glans penis. Pearly penile papules were also seen.(Fig 1E&1G)

**FIG 1A multiple flat topped violaceous plaques seen over lower limb**

**FIG 1B- multiple flat topped violaceous papules over upper limb**

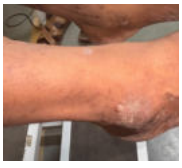

**FIG 1C- A tense perilesional bulla seen over right lateral malleolus**

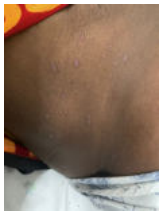

**FIG 1D – multiple flat topped violaceous papules over the abdomen**

**FIG 1E – single tense bulla seen over the glans penis along with pearly penile papules**

**FIG 1F- a ruputured bulla seen in the umbilical region**

**FIG 1G – multiple white streaks and annular plaques seen over the ventral surface of the penis**

Biopsy was done from two lesions and histopathological examination of section A revealed hyperkeratosis,spotty hypergranulosis

,acanthosis, focal areas of basal cell degeneration , lymphocytic infiltration of epidermis with pigment incontinence in the dermis. Dermo epidermal interface shows lymphocytic infiltrate . Section B shows a subepidermal bulla filled with fibrin. The epidermis shows mild acanthosis and basal cell vacuolation. The dermis shows lymphocytic infiltrate and pigment incontinence (Fig 2A&2B).

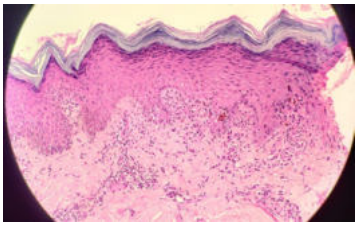

**FIG 2A – H&E stain showing hyperkeratosis, spotty hyperg ranulosis, acanthosis,basal cell degeneration, lymphocytic infiltration and pigment incontinence in the dermis**

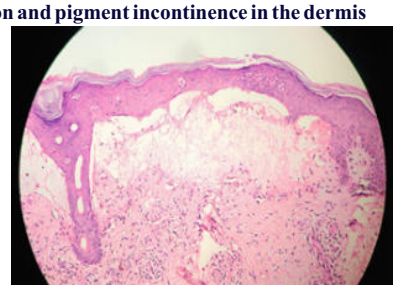

**FIG – 2B A subepidermal bulla filled with fibrin . mild saw toothing of rete ridges seen , vacuolation of basal cell layer ; lymphocytic infiltration seen in the dermis .**

A diagnosis of bullous LP was made with the characteristic clinical features and histopathology examination . The patient is being treated with oral dapsone 100mg\day, topical corticosteroids with topical antibiotics and oral antihistamines. The patient is under regular follow up.

## DISCUSSION

Lichen planus is an idiopathic, chronic, inflammatory dermatoses of the skin, oral mucosa, genital mucosa and skin appendages[1]. The classical clinical features of Lichen planus includes polygonal, pruritic, flat topped papules and plaues. Variants of lichen planus are oral, nail, linear, annular, atrophic, hypertrophic, inverse, eruptive, bullous, ulcerative, lichen planus pigmentosus, lichen planopilaris, vulvovaginal, actinic, lichen planus-lupus erythematosus overlap syndrome and lichen planus pemphigoides[1] . The pathogenesis of lichen planus is likely to be T-cell mediated immunity[2]. Bullous lichen planus is one of the rare variants of lichen planus characterized by tense blisters over the preexisting lichen planus lesions or near the lesions[3]. In Familial form , the lesions presents at a younger age and the course of the disease is lengthened[3]

Bullous lesions usually occur over the upper and lower extremites and oral cavity . the bulla contains clear fluid[4]. Formation of bulla is due to extensive inflammation of the basal cell layer leading to liquefactive degeneration[4][5]. Bullous lichen planus has to be differentiated from lichen planus pemphigoides which is a similar variant of Lichen planus [4]. Lichen planus pemphigoides usually occur on normal skin . However, bullous LP can also occur on normal skin rarely [5]. Lichen planus pemphigoides has a chronic course and has a positive direct immunofluorescence with linear deposition of IgG and C3 along the dermoepidermal junction[6]. Bullous lichen planus has a negative DIF and a shorter course compared to Lichen planus pemphigoides[6]

Histopathology of bullous lichen planus reveals a sub epidermal bulla with characteristic features of lichen planus hyperkeratosis, spotty hypergranulosis , basal cell degeneration and a dense band like infiltrate in the upper dermis. Saw toothing of rete ridges is rarely seen in Bullous lichen planus.[4]

Bullous lichen planus is treated with topical and systemic corticosteroids. In Bullous LP oral minipulse of betamethasone have shown to be effective.[8]. Oral Dapsone has also proved to be efficacious as well[7] A recent sudy has shown acitretin monotherapy to be highly efficacious in LP and bullous LP[5].

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