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Case Study

Case report on bullous lichen planus

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ABSTRACT

Bullous Lichen Planus (BLP) is a rare form of inflammatory and immune mediated muco-cutaneous lesion characterized by vesicles or bullae that occur in the sense of pre-existing lesions of Lichen Planus (LP). Biopsy is the essential diagnostic criteria to conclude the clinical features of BLP. The histologic features in conjunction with the negative immunofluoresence indicate that bullous lichen planus is a form of "hyper-reactive lichen planus". Here, we report a case of Bullous Lichen Planus presenting with multiple aggressive and hyper-pigmented raised lesion and blisters over both upper limbs and back for the last 3 months. There is no standard treatment for bullous lichen planus. Management aims to control symptoms and to decrease time from onset to resolution. It involves topical corticosteroids, but varies depending on the severity and location of the lesion. The symptoms resolved with the treatment of Tricyclic H1 antagonist (Desloratadine) and Corticosteroids (Clobetasol and Betamethasone).

Key Words: Bullous Lichen Planus, Lesion, Bullae, Tricyclic H1 antagonist, Corticosteroid.

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INTRODUCTION

Lichen planus (LP) is a chronic inflammatory dermatose in which mucocutaneous surfaces and nails are involved. The disease global prevalence is estimated at 1%[2]. Definitive etiology for oral lichen planus remains unknown [1].

Bullous lichen planus is an unusual variant that usually occurs over standard lichen planus lesions with blisters. Rarely, there are a few lesions in the adjacent skin. It is to be distinguished from Planus Pemphigoides in which the blisters are more common and extensive and the course is prolonged. Nonetheless, BLP is a sub-epidermal bulla with epidermal basal layer degeneration and classical LP characteristics on histological examination; immune-fluorescence in BLP IS negative, which is not the case in Lichen Planus Pemphigoides[4].

LP bullous type is a rare variant characterized by vesico – bullous lesion formation. Just a few cases were reported in the literature, making it difficult to estimate prevalence. However, bullae formation etiology in BLP is consistent with extensive basal cell layer vacuolar change. In an autosomal family, dominant forms may be inherited [5].

In addition to standard aggressive polygonal LP lesions, BLP usually presents as tense bullae. Many areas, including the dorsal parts of the hands and feet as well as the head, maybe affected, but the legs are most common site. Also recorded was a bullous lesion superimposed on glans penis, asymptomatic annular lichenoid lichen[3].

Management of LP and LP variants aims to control symptoms and to decrease time from onset to resolution; it often involves topical corticosteroids, but varies depending on the severity and location of the lesion [5].

CASE REPORT

85 year-old female patient registered with multiple aggressive and hyper-pigmented raised lesion and blisters over both upper limbs and back for the last 3 months to the Tertiary Care Teaching Hospital's Dermatology Inpatient Department. Patient gave a small swelling medical history that was initially seen in the limbs. She had a swelling filled with fluid that later ruptured.

There was a different lesion in the back around the same time. Previously, the patient underwent topical antifungal therapy that temporarily reduced the sensation of burning. The patient had no health, dental or family significance. She had no habit of smoking cigarettes but enjoys spicy food.

The patient had several well-defined lichenoid papules and plaques of varying sizes over the soft upper limb and back on examination.

The patient had several well-defined lichenoid papules and plaques of varying sizes over the soft upper limb and back on examination. Multiple vesicles and bullae were found in the lesion over exposed area. There were no other skin defects in the patient.

DIFFERENTIAL CLASSIFICATION

The lesion was provisionally identified as "Bullous Lichen Planus" in accordance with the medical history and presentation.

ANALYSIS

The essential hematological parameters of the patient have been tested and found to be within normal limits. The patient was referred for the lesion's skin biopsy.

HISTOPATHOLOGICAL FINDINGS

Macroscopic findings: Skin sample was put in formalin of ten percent. Specimens have been identified. The tissues were examined for histo-pathological evaluation.

Microscopic findings: The section showed skin with epidermis and dermis. The epidermis showed subepidermal bullae with eosinophils, lymphocytes, neutrophils and RBC's. vacuolar degeneration of basal keratinocytes were seen. Superficial dermis showed perivascular lymphocytic infilterate. No band-like lymphocytes were seen.

FINAL DIAGNOSIS

The lesion in the upper and back limbs was identified as BLP based on histopathological characteristics.

TREATMENT

The patient was advised to take 5mg of Desloratadine and 5mg of Betamethasone. The patient was also given topical application of Clobetasol.

DISCUSSION

Lichen Planus is a chronic autoimmune inflammatory disease in which the auto-antibodies are produced against the basal keratinocytes, leading to their degeneration. The lesion etiology is not well established because pressure in these patients is a frequently associated factor.

Endogenous or exogenous factors can cause it. Exogenous factors include drugs, restoration, infections, and food allergies. Endogenous factors include genetic factors and autoimmunity [1].

The characteristics of lichen planus are flattened papules with grayish-white scaly surfaces, polygonal, pruritic and rough. The affected sites usually include flexor wrist surfaces, forearms, dorsal hand surfaces and genital areas.

Based on the clinical suspicion, the diagnosis is confirmed by histopathology and immunofluorescence[5].

The clinical characterestics of BLP include common lichen planus lesions, followed by bullae formation on infected or perilous skin. This is evident in histology, with changes in the dermo-epidermal junction and intra-basal bullae due to extensive influences. Effective treatment have been identified with topical and systemic corticosteroids, dapsone and acitretin[2].

Other rare variants of LP that are seen are annular LP, LP pigmentosus and LP planopilaris. Erosive lichen planus in which the genital areas and gingiva are affected together is referred as vulvovaginal-gingival Syndrome (female equivalent) or penogingival syndrome (male equivalent) and collectively called as Genito-gingival Syndrome[3].

Lichen planus lesions replacing hair follicles with scarring tissue have also been reported. This type is called Lichen Planus Planoplilaris, which is more seen in women. There are three types: classic lichen planus planopilaris, with frontal fibrosing alopecia, which mostly affects postmenopausal women and Graham little syndrome in which scarring alopecis is seen in scalp only, involving loss of hair in pubis or axilla or other areas[5].

CONCLUSION

Bullous lichen planus is an inflammatory skin disease with characteristic clinical and histopathological findings. The pruritic, polygonal, violaceous, flattopped papules and plaques of BLP are the most common presentation of the disease, but morphology and location vary greatly among the variants. However, histopathological findings among the variants are largely consistent among the types. BLP is an inflammatory skin disease with clinical and histopathological findings that are distinctive. The most common presentation of the disease is the pruritic, polygonal, aggressive, flattopped papules and plaques of BLP, but morphology and position vary widely between variants.

CONFLICTS OF INTEREST

The authors have declared no conflicts of interests.

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REFERENCE

1. Liakopoulou A, Rallis E. Bullous lichen planus – a review. JDCR 2017; 11-1.
2. Babu A et al. Bullous lichen planus: Case report and review. J Pharm Bioall Sci 2019;11:506-499.
3. Boyd A, Neldner K. Lichen planus. JAAD. 1991;25(4):619-593.
4. Weston G, Payette M. Update on lichen planus and its clinical variants. IJWD.2015;1(3):149-140.
5. Vasudevan B et al. Bullous lichen planus. IJDVL. 2014;80(3):279.