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Successful treatment of bullous lichen planus with acitretin monotherapy. Review of treatment options for bullous lichen planus and case report.

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Abstract

Background: Bullous lichen planus (BLP) is a rare variant of lichen planus, characterized by the development of vesicular and bullous lesions, of skin, nails, hair and/or mucosa.

Main observations: We present a case of 63-year-old woman with BLP, unresponsive to previous therapies with topical corticosteroids, topical calcipotriol, antihistamines and oral cyclosporine (4 mg/kg/day for 4 months). She was already receiving treatment for arterial hypertension, hyperlipidemia, atrial fibrillation and uncontrolled diabetes mellitus. Acitretin was administered for 5 months with complete remission of BLP lesions and no major side effects.

Conclusions: This is probably the first reported case of BLP treated with acitretin monotherapy. In this case acitretin was an efficacious and well-tolerated therapeutic option for BLP. (*J Dermatol Case Rep*. 2016; 10(4): 62-64)

Introduction

Lichen planus (LP) is a relatively common, multifactorial, inflammatory disease that affects the skin, nails, hair, and mucous membranes.

Bullous lichen planus (BLP) is a rare variant, clinically characterized by vesico-bullous lesions.[1] Its exact prevalence is unknown. Treatment of BLP is challenging as only few cases have been published in the literature.

We present the first case of cutaneous BLP successfully treated with acitretin monotherapy and review the therapeutic options for this condition.

Case report

A 63-year-old, Caucasian, non-smoker female weighted 75 Kgr, presented to our outpatient clinic with multiple pruritic, violaceous, coalescent papules and bullae, of 5-year duration (Fig. 1A). The papular lesions were polygonal, round shaped or linear, probably due to Koebnerization. They were located at the dorsal aspects of the lower legs. Under careful examination, a few bullae could be seen over violaceus, pre-existing lichen papules (Fig. 1B). The bullae did not rupture spontaneously and were filled with clear fluid. Asboe-Hansen sign and Nikolsky sign were both negative. There were no oral lesions. Nails and hair were also normal. There was no previous history of febrile disease, weight loss or exacerbation of the eruption with sun exposure.

The patient had a 3-year history of lichen planus that had been diagnosed clinically. She had been treated unsuccessfully with potent topical corticosteroids, calcipotriol, calcineurin inhibitors, oral antihistamines and cyclosporine. Cyclosporine had been administered at a dose of 4 mg/krg/day for 4 months and was tapered off. Her medical history also included arterial hypertension, hyperlipidemia, atrial fibrillation and uncontrolled diabetes mellitus, under treatment.

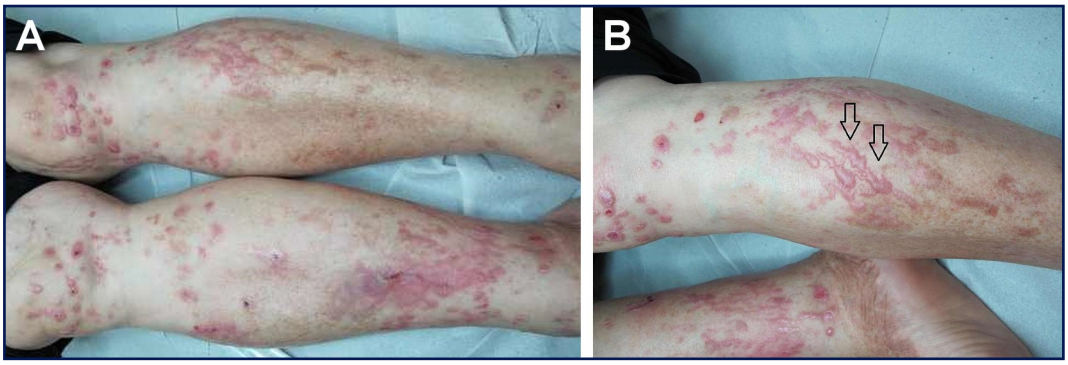

Figure 1
Violaceous papules (A) and a few bullae (B, arrow) located on the legs.

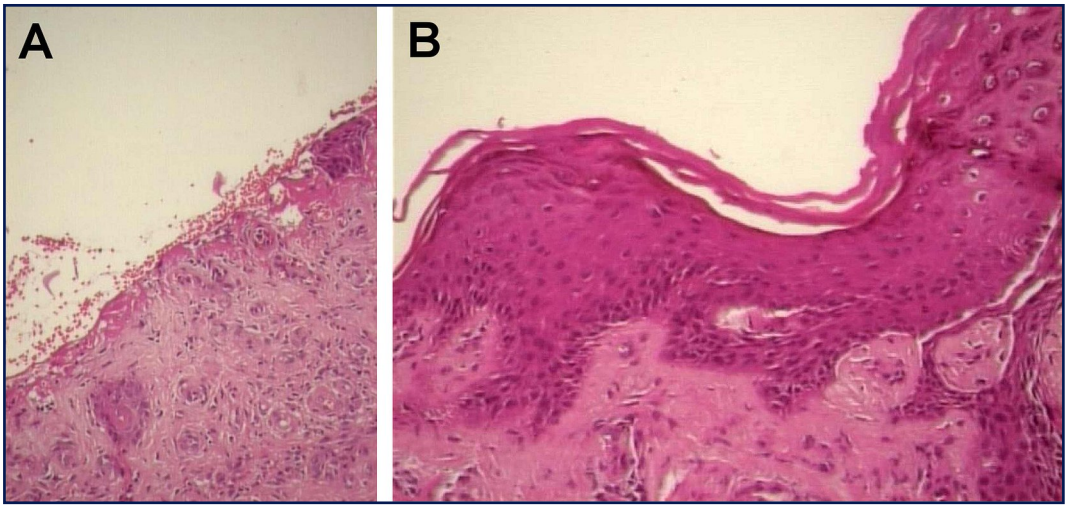

Figure 2
Histopathology from a bullous lesion, (A) with subepidermal clefting (H&E, ×10) and (B) with hypergranulosis and sawtooth-like acanthosis (H&E, ×40).

A 4-mm punch biopsy was obtained from a tensed bullous lesion overlying an erythematous papule. Histological examination revealed subepidermal clefting (Fig. 2A), circumscribed wedge-shaped hypergranulosis, a few colloid bodies and sawtooth-like acanthosis (Fig. 2B). In the upper dermis, mild inflammatory infiltrate consisting of lymphocytes and eosinophils was also observed. Direct immunofluorescence study was negative. Indirect immunofluorescence was negative for circulating autoantibodies of autoimmune bullous diseases. On the basis of clinical and histological findings, a diagnosis of BLP was made.

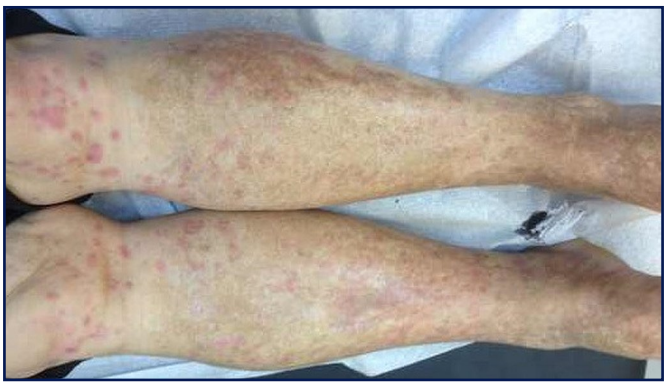

Figure 3
Significant improvement and residual postiflammatory hyperpigmentation treatment after acitretin monotherapy.

The patient did not consent to systemic corticosteroids because of her uncontrolled type 2 diabetes mellitus. Acitretin was started at a dose of 0,3 mg/Kgr/day. After 3 weeks of acitretin administration, laboratory blood tests, including lipid profile, were performed. The results were within normal ranges and no increase in the hypolipidemic medication was necessitated. Acitretin dose was then increased to 0,5 mg/Kgr/day. Monthly laboratory blood tests remained normal. Within the next 4 months, the rash and pruritus resolved, with residual postinflammatory hyperpigmentation (Fig. 3). Acitrecin induced cheilitis was well-tolerated with topical emollients. No other adverse events were recorded.

Discussion

LP is a common, cell-mediated inflammatory disorder with a worldwide distribution and an unknown origin. The prevalence of LP is approximately 1% of the general population and no racial or sexual predilection has been observed.

Bullous and/or blistering lesions are considered rare manifestations of LP. They are seen in the BLP and lichen planus pemphigoides (LPP) variants.

The bullae most commonly develop on the extremities and the oral cavity, especially on the buccal musoca. The cutaneous bullous lesions may be tense and multilocular containing

clear or hemorrhagic fluid. The mucosal lesions are rapidly ruptured leaving painful erosions. Bulla formation may be due to the extensive liquefaction and vacuolation of the basal layer.[2]

BLP should be differentiated from LPP. In BLP, bullae develop in longstanding preexisting lesions of LP and rarely from normal-appearing skin. It is thought that bulla formation is due to intense lichenoid inflammation and extensive epidermal damage.[2] Direct and indirect immunoflurescence are negative. The lesions may resolve within a few months or persist with remissions and exacerbations, for years.

Histological examination of BLP can be similar to LPP, revealing in both forms, a subepidermal bulla associated with other typical histologic findings of lichen planus.

LPP is clinically characterized by blisters arising principally from normal skin, but also from violaceus lesions. It has a similar to BLP clinical presentation, with predominantly acral distribution of bullous lesions.[3] The diagnosis of LPP is based on direct immunofluorescence which shows linear deposition of IgG and C3 at the dermal-epidermal junction.

There is no established treatment for BLP. Considering that BLP is a hyper-reactive form of LP, topical potent corticosteroids have been used empirically.[4] In a case of LP with bullous manifestation on the lip, treatment was achieved with a topical combination of tretinoin 0.025% and triamcinolone 0.1%.[5]

The use of acitretin has been proved highly effective in LP. Some authors consider acitretin as a first line therapy at a dose of 0.5—0.7 mg/kg until remission is achieved, and at a dose of 0.3—0.5 mg/kg thereafter, either as monotherapy or in combination with topical or systemic corticosteroids.[6,7] According to published data, there is no previous experience with acitretin as monotherapy for BLP but, it has been administered in combination with systemic corticosteroids for the treatment of LPP.[8,9]

Systemic corticosteroids are considered as a second line therapy for LP,[6] indicated for the management of severe or generalized forms.[4,7] Betamethasone oral minipulse therapy has been reported for the treatment of generalized and bullous LP.[7,10]

A few case reports suggest high efficacy of dapsone in pediatric and bullous LP.[11,12] Mycophenolate mofetil has also been reported to treat resistant hypertrophic and bullous LP.[13]

Conclusions

Our case suggests that acitretin may represent a promising, efficacious, and safe therapeutic option as monotherapy, for the management of BLP. Further studies including larger number of patients with BLP, are necessary to establish this view.

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