Atypical Clinical Manifestation of Actinic Prurigo, Case Report

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Introduction

Actinic prurigo (AP) is an idiopathic photodermatosis commonly affecting Mestizo populations of American countries and indigenous Americans Indians.^{1,2} Some studies suggest there could be a genetic predisposition; it has been reported association between AP and some Human Leukocyte Antigens (HLA) alleles; in the mexican population, alleles HLA-A28, HLA-B39 (B16) as well as HLA-DR (DRB1*0407).3-5 The disease is usually presented as a chronic course, with exacerbation after sun exposure. Intense itching is frequent as well as the presence of symmetric post-sun exposure injuries; most affected areas are usually superciliary arches, dorsum of the nose, malar area, lower lip, neck, and forearms.^{1,2} Besides these cutaneous injuries, 45% of the cases show pseudopterygium. AP is polymorphic and mainly include: erythematous macules, sores, papules

ABSTRACT

Actinic prurigo is an idiopathic photodermatosis with a chronic course, characterized by deep itching, erythematous macules, ulcers and/or papules in cutaneous areas exposed to sunlight. A 27-year-old Mexican Men presented due to vesicular ulcerated lesions on lips with 15 days of evolution and periods of exacerbation and remission since he was a child. A lower-lip biopsy was made, which confirmed the suspected diagnostic: actinic prurigo. Steroids were administered to the patient during a week, with remission of lesions. The vesicular ulcerative lesions, are an atypical clinical presentation of Actinic prurigo, which could make even more difficult the diagnosis.

which could turn into plaques, crusts, hyperpigmentation and lichenification.² Presence of vesicles has been always secondary to contact dermatitis, impetigo or eczema, which will complicate diagnosis of pathology, due to other photodermatosis coursing with vesicles, like polymorphic light eruption, actinic chronic dermatitis, amongst others.⁶

Case Report

A 27-year-old male patient, presented to our Oral Diagnostic clinic, due to lip injuries, with a presumptive diagnosis of herpes. During the interview, and clinical review, patient denies systemic diseases. He refers to taking acyclovir 400 mg every 12 hours as prescript due to pseudoherpetic lesions in lower lip, 2 days ago. The patient mentions that these lesions have appeared since he was 7 years old with remission and exacerbation

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periods after prolonged sun exposure. Current symptomatology has 15 days of evolution.

When exploring extraorally, multiple ephelides in malar region were found, as well as pseudopterygium in both eyes (Fig. 1), localized upper lip atrophy and irregular vesicular ulcerated areas associated to serohematic and meliceric crusts on lower lip. (Fig. 2). Papules and hyperpigmented scar lesions were observed in arms. (not show)

An incisional biopsy from ulcerated area of lower lip was made, with the next findings: epithelial ulceration, epithelial atrophy, spongiosis, acanthosis, edema of lamina propria, basal cell vacuolation, diffuse lymphocytic infiltration, mature macrophages and lymphoid follicles. These two last findings are compatible with actinic prurigo diagnosis. (Fig. 3, 4)

The patient was indicated to wear a cap, long sleeve shirt, sunglasses and sunscreen with a minimum of 15 SPF, as well as Prednisone 30 mg every 24 hours in the morning; after a week of treatment onset, an almost

complete resolution of lesions in the lip (Fig. 5), prednisone was discontinued and the treatment with topical corticosteroids, as well as sun protection measurements was kept. The patient is currently under supervision in our service without having reactivated lesions.

Discussion

We present the case of a male patient with vesicular ulcerated lesions in lower lip with 20 years of evolution, having exacerbation and remission periods, diagnosed as recurrent lip herpes, treated with antivirals and analgesics. Medical history and histopathological study outcomes allowed us to establish Actinic Prurigo



Fig 1. Clinical aspect at the first appointment, showing pseudopterygium in both eyes.

diagnosis. The background of these lesions in our patient during childhood is compatible with AP, which age of onset is during the first decade of life, as a consequence of a major sun exposure.¹ Episodes of AP after the first decade of life, like the one presented in this case, are usually sporadic and appear only if the individual is



Fig. 2 Clinical aspect, localized upper lip atrophy and irregular vesicular ulcerated areas associated to serohematic and meliceric crusts on lower lip.

exposed for a long time to sunlight, showing there is a major prevalence in patients whose job is outdoors, like in this case. Amongst predisposing factors to develop AP, sea level is included if this is over 1000 meters above mean sea level.⁷

Our patient lives in San Luis Potosi, México, which is a

city located at 1860 meters above sea level. The clinical manifestations observed in this individual could be considered as "atypical", since it showed vesicular lesions, unlike epithelial ulceration, epithelial atrophy, swelling, as well as meliceric crusts, hallmark of AP. However, lesions in our patient were located in sun exposed regions and they were alike to those described previously elsewhere.² We consider that the presence of these vesicles are secondary to contact cheilitis due to self-prescribed ointments. In our attempts to correctly diagnose this pathology, we analyzed the possibility of polymorphous light eruption and actinic chronic



Fig. 3 Histological aspects. In the connective tissue, lymphocytic inflammatory infiltrate and pigmentary incontinence and secondary lymphoid follicle were observed (× 10, HE)

dermatitis, which are both idiopathic photodermatosis with clinical course similar to that of AP. However, both pathologies were dismissed when clinical history and histopathologic findings were analyzed. Vega et al.,² mention that histopathological hallmark of AP is lymphoid follicles, which are usually observed in lower lip biopsies as in our case.

In regard to treatment, as mentioned previously protection against sun exposure and pharmacological treatment was suggested.

Pharmacological treatment of prurigo lesions will depend on the degree of severity of them; however, according to reports in the literature, oral and/or topic steroids are prescribed, as mentioned by Hojyo-Tomoka et al.,⁶ If lesions persist, it should be considered the use of



Fig. 4 Epithelial atrophy and intense diffuse lymphoplasmacytic inflammatory. Epithelium showing spongiosis, hydropic degeneration of the basal layer cells and lymphocytic exocytosis (\times 20, HE).



Fig. 5. Showing complete remission after treatment of the lesions in both, upper and lower lip.

thalidomide, taking into consideration its high risk of

theratogenesis and secondary effects on central nervous system.^{6, 8,9}

Conclusion

Actinic prurigo is characterized by well-defined features, however secondary lesions could appear (like vesicles) which could represent a challenge for diagnosis and adequate treatment.

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