Oral prednisone: A unique and effective treatment for actinic lichen planus

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Actinic lichen planus is a rare clinical variant of lichen planus that typically presents in the summer time in patients of Middle Eastern descent. We report a case of actinic lichen planus and propose oral prednisone as an effective treatment option.

CASE

A 20-year-old Fitzpatrick type IV woman presented to the dermatology clinic with a 2-month history of several rapidly enlarging discrete facial plaques. All lesions were located on sun-exposed areas, including the patient’s forehead, around her mouth, and on the lower vermilion border. These lesions first began in the summer, were asymptomatic, and had no previous treatments to date. The patient had no significant medical history and was not taking any medications. Her father was of Middle Eastern descent.

Physical examination found several dark brown annular plaques on her left forehead (Fig 1), left chin, and left lateral vermilion border (Fig 2). Each lesion had a distinct hypopigmented rim. There were no other lesions found, including at the wrists, mucous membranes, axillae, and nails.

Laboratory values of the complete blood count, complete metabolic panel, lipid panel, hepatitis panel, antinuclear antibody, and Treponema pallidum IgG antibody were all within normal limits.

A skin biopsy specimen from the border of the forehead plaque was obtained. Histopathologically, the lesion was identical to lichen planus with a sharply demarcated bandlike lymphocytic infiltrate, epidermal thinning, coarse basal cell vacuolization, and civatte bodies (Fig 3). Numerous melanophages were seen. Verhoeff-van Gieson staining found slight elastolysis. No direct immunofluorescence was obtained.

Given the findings of the clinical examination, laboratory values, and histopathologic results, a diagnosis of actinic lichen planus was rendered. The patient was started on tacrolimus 0.1% ointment twice daily, and oral prednisone at 60 mg/d, decreased by 20 mg per week over the course of 3 weeks. Although topical agents alone are usually the initial treatment, systemic steroids were added in this case considering the rapidly progressing photoexacerbated lesions. Furthermore, the patient’s occupation required long periods of sun exposure, and an upcoming occupational commitment would take her far from any immediate medical or dermatologic care. The active borders of the lesions rapidly resolved within 4 weeks on this regimen, with minimal residual central hyperpigmentation that faded over the 6 months of follow-up (Fig 4). After completing the oral steroid course, the patient was transitioned to topical clobetasol 0.05% ointment 3 times a week and continued on tacrolimus 0.1% ointment twice daily. The goal was to arrest the disease progression before transitioning to topical-only agents because her occupational commitment did not allow for an adequate trial of topical agents to
see if she responded. At the time of publication, the patient has had no recurrence to date.

**DISCUSSION**

Actinic lichen planus is a rare clinical variant of lichen planus that has been reported with a variety of different names: lichen planus subtropicus, lichen planus tropicus, summertime actinic lichenoid eruption, lichenoid melanodermatitis, and lichen planus actinicus. Actinic lichen planus usually presents in young adults of Middle Eastern descent, and lesions are almost always asymptomatic. The eruptions often occur in the spring or summer and involve sun-exposed areas, most commonly the face.

The pathogenesis has not been well established, but several studies found that lesions can be reproduced with ultraviolet radiation. Treatment with the use of Grenz rays, x-rays, and bismuth have been reported as somewhat effective. Hydroxychloroquine and acitretin with topical glucocorticoids have also been used successfully in the past.

This disease has been reported several times in publications out of the Middle East, but curiously, no recent publications on actinic lichen planus could be found from the last decade. It is also not a commonly recognized condition in the United States, with most of the literature originating from Europe. There is one reported case of actinic lichen planus treated...
with oral prednisone, which was in an East Asian patient in Japan. Our unique case suggests that a short taper of oral corticosteroids rapidly improves the lesions and maximizes overall cosmesis. We think that oral corticosteroids should be considered as a first-line therapy for actinic lichen planus based on severity of the disease, patient comorbidities, and patient preferences.

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