Melasma-like actinic lichen planus in a middle-aged Saudi male

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Abstract

Actinic lichen planus (LP) is a rare variant of the common papulosquamous disease LP. It occurs mainly on sun-exposed parts of the body and has a high incidence during spring and summer. We report a case of melasma-like presentation of actinic LP in a 52-year-old Saudi man not known to have any comorbidities, who presented with asymptomatic, hyperpigmented patches on the face.

Keywords: Actinic lichen planus, dermatopathology, melasma

Introduction

Hyperpigmented, symmetrically distributed macules over the face can have many differential diagnoses, including melasma, photodermatitis, cutaneous lesions of lupus erythematosus, and variants of lichen planus (LP). It is important to consider dermatopathology to confirm the diagnosis in cases where the clinical presentation is atypical. Many differential diagnoses should be kept in consideration in case of lesions with this description on the face. This lesion is very commonly presented to the primary healthcare setting diagnosed as melasma and managed conservatively. At the primary healthcare setting, a lot of differential diagnoses need to be kept in consideration if a similar lesion distributed over the face presented as in this case.

Case Report

A 52-year-old Saudi male presented with asymptomatic, hyperpigmented macules on the nose and cheeks (mainly the left side of the cheek) that first appeared 6 months ago [Figure 1]. The macules were violaceous and had an irregular border; there were no rolled edges. The patient had a history of significant sun exposure because of his working nature as a labor supervisor for outdoor work. He was not using any sun protection. There

Figure 1: Dark violaceous melasma-like patches over the nose and on the cheek
was no history of any other significant skin or mucosal lesions, systemic diseases, topical application, or trauma. Laboratory results revealed a normal blood count and liver function tests. Anti-nuclear antibodies and anti-double-stranded antibodies were negative. The violaceous color indicated the probability of a lichenoid process. Skin biopsy showed hyperplasia of the epidermis and a band-like inflammatory infiltration. High power magnification under microscopic examination showed the presence of dyskeratosis with hypergranulosis in the epidermis, and vacuolar degeneration in the basal region. In the upper dermis, the majority of the inflammatory cells were clusters of lymphohistiocytes. Cytoid bodies and lichenoid infiltrate were seen at the epidermodermal junction [Figures 2 and 3].

Based on the histological findings, a final diagnosis of LP was considered. Additionally, based on the flat appearance, absence of itching, and distribution, a specific diagnosis of melasma-like actinic LP was considered. The patient was advised topical steroids and sunscreens. Ethical approval and institutional permissions were obtained. Informed consent was obtained from the patient for publication of this case report.

Discussion

Four morphologic patterns of actinic LP have been clinically described in the literature. The most common form is the atrophic form, which is characterized by hyperpigmentation. The second is the dyschromic type, exhibiting small, white angular papules on the neck and the dorsal side of the hands that merge into plaques. As violaceous papules, the classic plaque-like form presents itself, and the pigmented form can be seen on the face and neck as melasma-like patches. Our case was compatible with the melasma-like type of actinic LP according to clinical manifestations of the lesion. Exposure to sunlight tends to be central to actinic LP pathogenesis although there is still no evidence for photoinduction of lesions in actinic LP. Our case was compatible with the melasma-like type of actinic LP according to clinical manifestations of the lesion. Exposure to sunlight tends to be central to actinic LP pathogenesis although there is still no evidence for photoinduction of lesions in actinic LP. Actinic LP has no sex predilection and occurs mostly in young people; yet in our case, the patient was of middle age. The lesion is usually asymptomatic and appears mostly during spring and summer, as reported for our patient. Pruritus, the Koebner syndrome, and the presence of the mucous membrane are not usually seen in all forms of actinic LP, unlike classic LP. In conjunction with histological findings, consistent with those of classic LP, diagnosis is usually made based on the distribution in sun-exposed areas. The differential diagnosis of actinic LP may resemble a variant of dermatological conditions such as discoid lupus erythematosus, melasma, morphea, LP pigmentosus, and lichenoid drug eruption. The diagnosis of actinic LP is usually accomplished by histopathological and clinical correlation. Histopathologic findings of actinic LP also display similarities with classic LP, such as hyperkeratosis, wedge-shaped hypergranulosis, epidermis necrotic keratinocytes, and dermis band-like lymphocytic infiltration. However, atrophic change might be more prominent.

Several modalities have been mentioned for the treatment of actinic LP. Sunscreen is one of the important modalities based on the fact that sunlight might be the major precipitating factor for actinic LP. Topical corticosteroids and intralesional corticosteroid injections are commonly used. Antimalarial agents could be used for the treatment of actinic LP. Recently, topical 0.1% tacrolimus cream has been reported to be successful in the case of actinic LP.

Finally, although LP is quite frequent, it can occasionally appear with an uncommon varied clinical presentation, making its diagnosis difficult. Actinic LP and its clinical variants should be kept in mind when dealing with lesions of a similar nature. A punch biopsy is a simple procedure, and LP shows very typical and specific features on histopathology that help to easily confirm the diagnosis. A lot of cases can be missed and dealt with as melasma.

Acknowledgments

I thank the patient for his cooperation and his agreement for photography for publication. I would also like to thank my colleagues for their contributions.
Consent
Informed consent was obtained from the patient for publication of this case report. Ethical and institutional permissions were obtained.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

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