

## ACTINIC LICHEN PLANUS IN A CHILD – A RARE ENTITY

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### Abstract

Lichen Planus actinicus (LP actinicus) is a variant of lichen planus often confined to individuals in tropical and subtropical regions. The lesions involve sun-exposed areas and are characterized by well-defined nummular patches which have a deeply hyperpigmented centre surrounded by a hypopigmented zone. It mainly involves teenagers with an Asian racial profile. We report a rare case of a 10 year old male child who reported to the department of dermatology with multiple annular pigmented patches on the face, forearms and shins which developed slowly over a period of one year.

**Key words:** Lichen planus; actinic; variants; pigmented; histopathology; children

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### Introduction

Actinic lichen planus (ALP), also known as lichen planus tropicus, is a rare variant of Lichen planus that typically affects children or young adults with dark skin that live in tropical or subtropical regions [1]. It is important to identify certain conditions like melasma which may mimic actinic lichen planus [2]. Melasma occurs more in females and it is oestrogen dependent.

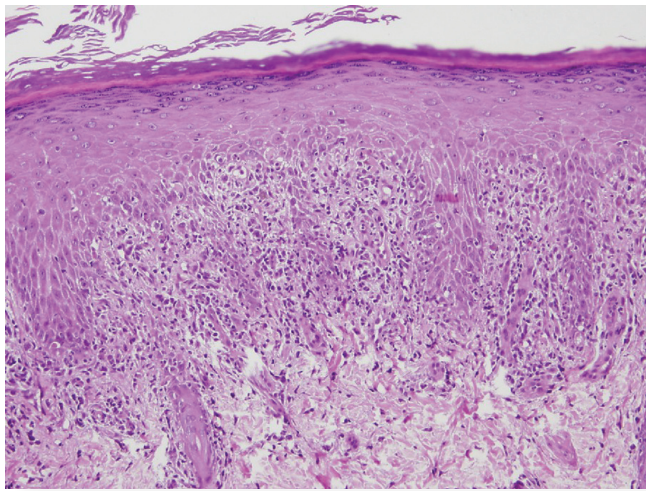
### Case Report

We report a rare case of a 11 year old male child who reported to the department of dermatology with multiple annular pigmented patches (Fig. 1) on the face, forearms and shins which developed slowly over a period of one year. The patient had history of sunexposure since 4 years. Dermatological examination showed skin phototype IV. Examination of the patient's nails and oral mucosa was normal. There was no lymphadenopathy and the patient was generally well. All the routine investigations of the patients were normal. The patient was examined for hepatitis B and hepatitis C antigens and they were negative. Histological findings showed compact hyperkeratosis, wedge-shaped hypergranulosis, saw-toothed hyperplasia, coarse basal cell vacuolization, and civatte bodies. A bandlike inflammatory cell infiltrate (Fig. 2) in the papillary dermis invading the lower layers of the epidermis with liquefaction of basal cells and presence of melanin in the

dermis was found. Direct imunofluorescence of the exposed skin was negative. A diagnosis of actinic lichen planus was made and laboratory investigations revealed no inflammatory syndrome and no antinuclear antibodies. The patient received topical corticosteroids of intermediate level for a short time associated with sunblock. His symptoms partially improved within 3 months with a relapse of pigmented lesions following sun exposure.



Figure 1. Actinic lichen planus in a 11 year old child.



**Figure 2. Acanthosis, lichenoid mononuclear dermal infiltrate and colloid bodies. (H& E stain 100x)**

### Discussion

Lichen planus actinicus is a photosensitive variant of lichen planus that can present with annular, melasma-like, dyschromic, or violaceous plaques in sun-exposed areas. A racial predilection to Asians with dark complexions and patients living in tropical and subtropical countries has been noted. The eruption usually appears during spring and summer, and improvement or complete remission takes place during the winter, leaving hyperpigmented patches [3]. However, relapses may occur during subsequent sunny seasons. There are three forms of actinic lichen planus including annular, pigmented and dyschromic. The most common form is the annular type, which consists of erythematous brownish plaques with an

annular configuration, with or without atrophy. The pigmented type consists of hypermelanotic patches, with a melasma-like appearance. The pathogenesis of ALP is still unknown. Sunlight appears to be the major precipitating factor, probably under the influence of genetic or other factors (hormonal, toxic, or infectious factors, etc.). Treatment strategies for lichen planus actinicus are based primarily on anecdotal reports but should include the use of sunscreens and sun avoidance [4]. Hydroxychloroquine, intralesional glucocorticoids, and acitretin with topical glucocorticoids have been used successfully in patients with lichen planus actinicus. 0.1% pimecrolimus cream has been tried in some patients with good results [5]. In recalcitrant cases, treatment has been tried with intense pulse light (IPL) [6]. The case is rare and hence being reported.

### REFERENCES

1. Bouassida S, Boudaya S, Turki H. Actinic lichen planus: 32 cases. *Ann Dermatol Venereol*. 1998;125:408-13.
2. Salman SM, Khallouf R, Zaynoun S. Actinic lichen planus mimicking melasma. A clinical and histopathological study of three cases. *J Am Acad Dermatol*. 1988;18:275-8.
3. Salman SM, Kibbi AG, Zaynoun S. Actinic lichen planus. A clinicopathologic study of 16 patients. *J Am Acad Dermatol* 1989; 20: 226–31.
4. Meads SB, Kunishige J, Ramos-Caro FA, Hassanein AM. Lichen planus actinicus. *Cutis*. 2003;72:377-81.
5. Ezzedine K, Simonart T, Vereecken P, Heenen M. Facial actinic lichen planus following the Blaschko's lines: successful treatment with topical 0.1% pimecrolimus cream. *Eur Acad Dermatol Venereol*. 2009;23:458-9.
6. Santos-Juanes J, Mas-Vidal A, Coto-Segura P, Sánchez del Río J, Galache Osuna C. Pigmented actinic lichen planus successfully treated with intense pulse light. *Br J Dermatol*. 2010;163:662-3.