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Visual Treats in Dermatology

# Blaschkoid lichen planus pigmentosus

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A 25-year-old male with no known comorbidities having Fitzpatrick type III-IV presented to our outpatient department with a 3-month history of multiple diffuse grayish large macules of variable size and shape over the left side of his abdomen with an irregular border and sharp midline cut-off [Figure 1a]. There was no itching over the lesions nor did the patient have any preceding history of rash, trauma, or topical applications. On clinical evaluations, our differentials included lichen planus pigmentosus, ashy dermatosis, post-inflammatory hyperpigmentation, lichen striatus, and incontinentia pigmenti. A dermoscopic examination of the macules revealed a grayish background with a few scattered grayish dots and globules with peri-follicular and peri-eccrine accentuation and sparing of skin creases [Figure 1b]. Further histopathological examination revealed an increase in basal layer pigment with interface dermatitis and pigment incontinence, which was suggestive of lichen planus pigmentosus (LPP) [Figure 1c]. Thus, a combined approach led to the diagnosis of Blaschkoid LPP. The patient was prescribed topical tacrolimus 0.1% and glycolic acid peels and was lost to follow-up.



Figure 1: (a) Multiple discrete to confluent grayish hyperpigmented macules of variable size and shape over the left side of the abdomen with an irregular border and sharp midline cut-off. Furthermore, few discrete macules can be seen on the other side as well and upper trunk, (b) dermoscopy showing grayish background with a few scattered grayish dots and globules with peri-follicular and peri-eccrine accentuation and sparing of skin creases (Dermlite, DL4, ×10), (c) histopathological examination revealing an increase in basal layer pigment with interface dermatitis and pigment incontinence (Hematoxylin and Eosin ×100).

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LPP is a pigmentary condition of unknown etiology and is considered a rare variant of lichen planus. It is characterized by bilaterally and symmetrically diffuse grayish to bluish-gray macules of variable size and shape involving predominantly sun-exposed areas such as the face, neck, and trunk.[1,2] Usually asymptomatic but can present with pruritus in 30% of patients. [3] The atypical presentation includes linear, zosteriform, and segmental. LPP in Blaschkoid patterns has rarely been reported. [4,5] The pathophysiology of this disease is unknown. Still, contributory factors include lichenoid reactions to unknown substances such as viral agents, vaccinations, trauma ultraviolet radiations, topical mustard oil applications, and cosmetic agents like hair dyes. [3-5] CD8+ mediated cellular response and mediators such as interferongamma, tumor necrosis factor-alpha, interleukin 6, and lymphocyte function-associated antigen 1 have found some role.[3,4] The Blaschkoid pattern in LPP can be explained by the cutaneous antigenic mosaicism that can induce a mosaic T-cell response.[3] Treatment options include topical steroids, calcineurin inhibitors, peels, and retinoids with variable responses. Q-switched lasers have been tried with variable response.[4,5]

This report presents a rare variant of lichen planus in an unusual presentation. It reaffirms that a combined clinical, dermoscopic, and histopathological approach should be used to differentiate it from a case with similar pigmentation and patterns.

#### Ethical approval

Institutional Review Board approval is not required.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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#### **Conflicts of interest**

There are no conflicts of interest.

# Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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