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# LICHEN PLANUS PIGMENTOSUS: TWO ATYPICAL PRESENTATION

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## Abstract

Lichen planus pigmentosus (LPP) is a chronic pigmentary disorder with variable pattern of presentation. We here by present two cases of LPP one with parallel band like pigmentation over abdomen sparing the abdominal skin creases and other with parallel band like pattern following the Blaschko's lines over left side of the abdomen. Our cases are unique not only for its presentation but also for the pattern of distribution and LPP should be the differential diagnosis in any pigmentary disorders.

Key words: lichen planus pigmentosus; parallel band; Blaschko's lines

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#### Introduction

Lichen planus pigmentosus (LPP) is an autoimmune, chronic pigmentary disorder. It was first described by Bhutani et al. [1]. It may be diffuse, reticular, blotchy, and linear. Face, neck, upper part of back, trunk and extremities are common sites of involvement while flexures larea are infrequently involved [2].

## **Case Report**

#### Case 1

A 17 year old male student, presented with asymptomatic band like pigmentation over abdomen (Fig.1) for last 6 months. Pigmentation first started as small macules over the abdomen sparing the skin creases and the macules gradually enlarged laterally to form a band like appearance parallel to skin fold. The confluent macules were bluish black in colour with an irregular non erythematous border. Face, oral mucosa and other body areas were normal. There was no history of excessive sun exposure, frictional trauma or previous inflammatory condition over the site or any incriminating drug intake prior to onset of lesions.

Routine blood and urine examination was within normal limit. Hepatitis C profile was negative. Histopathological examination of a punch biopsy from the abdominal lesion revealed epidermal atrophy, basal layer degeneration, pigmentary incontinence and few inflammatory cell infiltrates in dermis consistent with lichen planus pigmentosus (Fig. 2).

#### Case 2

A 35 year old woman presented to us with bluish-black pigmentation over left side of abdomen of three months duration. Lesion initially started as discrete macules which later coalesced with each other to form linear bands like pattern following Blaschko's lines only over the left side of abdomen (Fig. 3). These lesions were asymptomatic and there was no history suggestive of any inflammatory lesion over these sites previously. There were no mucosal lesions. A histopathological examination of abdominal lesion was consistent with a diagnosis of lichen planus pigmentosus (Fig. 4).

## Discussion

LPP is an uncommon variant of lichen planus and relatively common pigmentary disorder in Indian and Asian population with distinct clinical and histopathological characteristics [1,2]. As seen in our patient the commonest type of pigmentation is a bluish black one [2]. Other types are slate gray, dark brown and brownish black. Though LPP is most common on sun exposed areas such as face, neck, involvement of the flexural areas such as axillae, submammary areas and groin have also been reported [2,3]. The term LPP-inversus is used for the lesions involving the flexural areas [4]. Lesions initially appear as small macules and gradually become confluent over time to large areas of pigmentation. Lesions may be diffuse, reticular or rarely blotchy and perifollicular [2].



Figure 1. Parallel band of pigmentation



Figure 3. Band of pigmentation following Blaschko's lines

In our first case lesion started similarly as discrete macules and became confluent to form parallel band like pattern over abdomen and speared the skin creases. The commonest differential diagnoses considered was ashy gray dermatosis but an early presentation and the histopathological findings established the diagnoses of LPP. Skin crease sparing may be explained by a relatively less sun exposure over the site for sitting habit. There are few reported cases of linear pattern [5], zosteriform pattern over trunk [6] and involvement of non sun exposed areas such as thigh [7] but to the best of our knowledge there is no reported case of band like distribution of LPP. The commonest differential diagnoses of the linear pigmentation in second case are incontinentia pigmenti, linear and whorled nevoid hypermelanosis but the late onset and histopathological findings ruled out these possibilities. Linearity of the lesions may be related to Blaschko's lines, which suggests the predisposition to develop LPP determined during embryogenesis [5].

### Conclusion

Our cases are unique not only in their atypical presentations but also to the pattern of band like presentation.

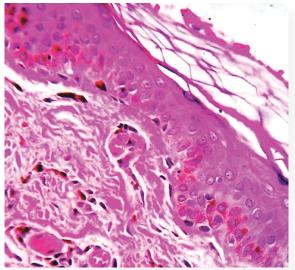


Figure 2. Photomicrograph (x400, H&E stain) showing HPE of LPP

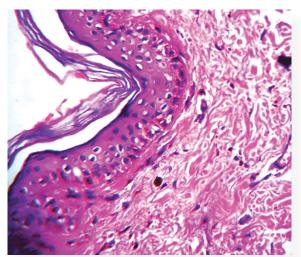


Figure 4. Photomicrograph (x400, H&E stain) showing **HPE of LPP** 

Thus LPP should be a differential diagnosis in every case of pigmentation disorder irrespective their sites and pattern of presentation.

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