

# Case Report

## A 10 years boy presented with facial pigmentary demarcation line: A case report

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### Abstract

Pigmentary Demarcation line (PDL) is a sharp demarcation from a high-colored area to light-colored area. It appears on the limb, face, and sometimes trunk. There are eight types (A-H) of PDL have been described. The face is an important area for PDL. F-H types of PDL involve the face. Here a 10-year-old boy presented with facial pigmentary demarcation line (PDL) is reported.

**Key Words:** Pigmentary Demarcation lines, Futcher's lines, Voigt's lines, Face

### Introduction:

Human skin colouration varies among races and even in the same race. Pigmentary variation is noticed in different areas of a single person. Some localized dark colouration is also considered as normal variation: the genital area, the elbows and the knees, the knuckles and the infraorbital area.<sup>1</sup> The Pigmentary demarcation lines (PDL) are areas of physiological variation of skin colour where a line sharply differentiates an area of hyperpigmentation from hypopigmentation.<sup>1</sup> It is also called Futcher's or Voigt's lines.<sup>2</sup> This may be due to variations of melanocyte distribution influenced by different factors. They are seen on the limb, face and trunk and are common in black. These PDLs can be classified into eight groups as A-H (table I).<sup>3-5</sup>

- A Lines passing along the lateral aspect of the upper limb with variable transpectoral distribution.
- B Lines on the posteromedial aspect of the lower limb
- C Median or paramedian lines on chest and abdomen
- D Lines on the posteromedial aspect of spine
- E Lines from mid-third of clavicle to periareolar area
- F "V" shaped hyperpigmentation between temple and malar area over the face
- G "W" shaped hyperpigmentation over the anterolateral area of the face between temple and malar area
- H Band of hyperpigmentation over the lower part of face extending from angle of mouth to lateral aspect of chin

### Case report:

A 10-year-old boy presented with complaints of hypopigmentation in the periocular area and a hyperpigmented patch in the malar area with a clear-cut demarcation between the two areas. It was noticed at a very early age and became prominent day by day. There was no other associated symptom.

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## A case report

His only sibling had a similar type of facial pigment variation. He gave no history of intense sun exposure, using cosmetics or taking any medication. Patients were asked about any drug intake and application of any topical medicaments. The Woods lamp showed no colour changes. There was no other systemic or cutaneous abnormality.



### Discussion

PDL is commonly seen during early childhood and remain unnoticed.<sup>6</sup> It may later become prominent and visible with some triggering factors including typhoid, hepatitis, chickenpox, and hormonal changes during adolescence and pregnancy.<sup>7</sup> Here the boy presented with facial PDL at 12 years of age. PDL may have a genetic predisposition.<sup>4</sup> The boy had a sibling with similar facial pigmentation. Facial PDL should be differentiated from facial Melasma, nevus of Ota, photodermatitis and postinflammatory hyperpigmentation. Melasma is usually present as a blotchy patch and can also involve other areas including the malar area, nose, forehead, supra-orbital areas or upper lips.<sup>8</sup> Facial PDL presents as bilaterally symmetrical, homogenous hyperpigmentation extending from lateral orbit or angle of mouth.<sup>8</sup> The patient had no history of any inflammatory or preexisting facial skin disease differentiating from post-inflammatory hyperpigmentation.

### Conclusion:

Facial Pigmentary demarcation lines are common persisting physiological colour variations and usually remain unnoticed. It is an important cosmetic concern and diagnosis is important to exclude from the other facial pigmentation for proper management.

Conflict of interest

Photographs are published with the permission of parents.

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