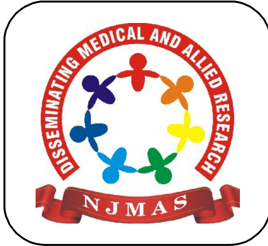

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UNILATERAL BLASCHKOID LICHEN PLANUS: A RARE ENTITY

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Abstract

Blaschko's lines are characteristic of mosaic conditions of the epidermis and probably represent the routes of ectodermal cell migration from the neural crest . Many skin disorders follow the lines of blaschko. There are many clinical variants of lichen planus(LP). We report a striking case of unilateral linear lichen planus following Blaschko lines on the trunk.

Key words:Lichen planus, blaschko lines,linear lesions.

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Introduction:

The term 'lichen' is originally derived from Greek verb 'to lick'. However, the term also denotes for a symbiotic form of plant life. Lichen planus was first described by Erasmus Wilson in 1869 and is characterized by purple, pruritic, polygonal, papular eruption of unknown etiology affecting predominantly the skin but can also involve the mucous membranes and the nails. Many morphological variants of lichen planus have been described, of which linear and zosteriform lichen planus are rare and the unilateral lichen planus seems to be rarer.[1] Blaschko's lines do not correspond to nervous, vascular or lymphatic structures. [2]

These lines represent the distribution of autonomic motor-visceral afferents or stretching of the skin during embryogenesis. The Blaschko lines may be followed by some X-linked, congenital and inflammatory skin disorder.

Case report:

A 48-year-old healthy man presented with a six months history of red raised lesions on the right side of his trunk. He had no other medical or surgical illness in past. He had received no prior treatment. General physical and systemic examination was normal. Dermatological examination revealed multiple, discrete, violaceous papules distributed in linear fashion, forming S shaped patterns over the right chest and trunk (Fig. 1&2), with a sharp demarcation at the midline. The lesions followed the lines of blaschko. Oral mucosa was normal. He was investigated throughly and reports were within normal limits. Serology for hepatitis B-virus and hepatitis C-virus were negative. A skin biopsy taken from a papule on the trunk showed orthokeratosis, acanthosis, and hypergranulosis. Basal cell degeneration with colloid bodies along with a band-like mononuclear infiltrate at the basement

membrane was seen. Upper dermis showed melanin incontinence with melanophages. He was managed with oral prednisolone 0.5 mg/kg/day for 15 days and gradually the dose tapered over the next 2 months. The lesions flattened with hyperpigmentation.

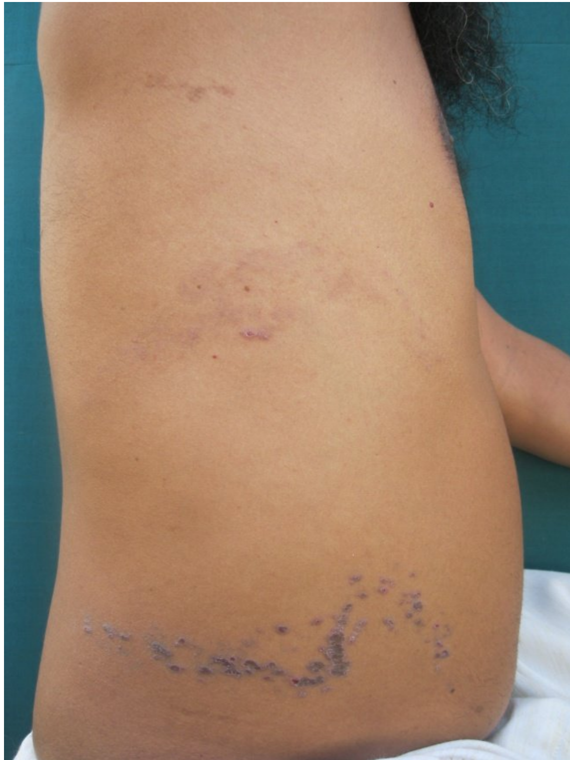

Fig. 1

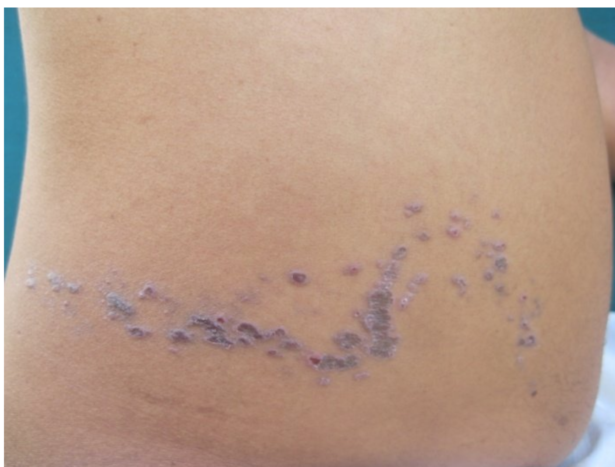

Fig. 2

Discussion:

Lichen planus is a cutaneous and mucous-membrane disorder of unknown etiology characterized by pruritic, planar, polygonal, purple papules that have white lacy reticular surface. Several variants have been described, including linear lichen planus sometimes following Blaschko lines. Blaschko lines, distinct from Voight lines, Langer lines, and the lines of innervation of the spinal nerves, follow a V-shape on the back, an S-shape on the abdomen, an inverted U-shape on the upper chest, and a linear pattern down the front and back of the lower extremities [2,11]. Long et al. reported linear lichen planus following Blaschko lines, as in our patient [4]. This patient's lesions were not confined to one side of the body, but rather began on the right side of the chest and spread to the trunk, arms, left thigh, left foot, and third finger of both hands. Unilateral lichen planus is also described. Saxena et al. report a 26-year-old healthy woman with lichen planus distributed over only the left side of her body below the neck [5].Some cases of linear lichen planus presenting in a unilateral distribution have been reported in patients with precipitating factors. Krasowska et al. reported a case of a healthy 33-year-old woman with lichen planus in a linear distribution following Blaschko lines limited to the right side of the body occurring after three successive deliveries of healthy babies [6]. Her hepatitis B and C serologies were negative, and she had no nail or mucosal involvement. Jury et al. reported a case of linear lichen planus confined to the right lower extremity in a 36-year-old man with a 3-year history of hepatitis C [7]. In addition, Gupta et al. reported a case of linear lichen planus confined to the left side of the body of a 61-year-old man; this was thought to result from the Koebner phenomenon secondary to the nitroglycerin patches the patient used in the involved areas [8]. Hartl et al. reported a prior case of unilateral linear lichen planus in a 33-year-old healthy hepatitis-C negative woman who had a linear eruption of lichen planus isolated to the left side of her neck that eventually involved the left side of her tongue and her left buccal mucosa [9].

The differential diagnosis of Blaschkoid LP includes lichen striatus, epidermal nevus, and linear psoriasis. Our case demonstrates an uncommon presentation of lichen planus that was both linear and unilateral in a healthy woman with no known precipitating factors. The pattern seen in the figures demonstrates the unusual pattern of lichen planus in this patient that resembles that seen in other mosaic dermatoses. It is very difficult to explain the occurrence of an acquired dermatoses along the Blaschko's lines, which usually are followed by the inherited/genetic disorders and that too, limited to one half of the body. There may be a genetic pre-disposition to lichen planus and exposure to an appropriate enviromental or endogenous trigger may lead to the development of lichen planus. Nevertheless, it is difficult to explain why the lesions were confined to one half of the body, unless mosaicism is considered[10,11].

Conclusion:

Lichen planus (LP) can have many clinical variants and unilateral linear lichen planus following blaschko lines on the trunk is rarest.

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