

CASE REPORT

UNILATERAL PSORIASIS ALONG BLASCHKO LINES

Naeem Raza, Pervaiz Iqbal*, Javed Anwer*

Department of Dermatology, Combined Military Hospital, Abbottabad and *Department of Dermatology, Liaquat University Hospital, Hyderabad.

Atypical forms and unusual localizations of psoriasis are quite frequently seen. However, psoriasis arranged unilaterally along Blaschko Lines is extremely rare. We report a case of an adult male, who presented with unilateral psoriasis arranged in Blaschko Lines on left side of the body.

KEY WORDS: Psoriasis, Blaschko Lines, Unilateral.

INTRODUCTION

Psoriasis is an inflammatory and proliferative, constitutional disorder, which commonly presents as sharply demarcated, erythematous and scaly plaques, predominantly located over extensor surfaces of the body. In a common condition like psoriasis, unusual localizations and atypical presentations of the disease are quite frequently encountered in clinical practice. However, unilateral psoriasis arranged linearly or along Blaschko Lines in the absence of typical lesions elsewhere on the body is extremely uncommon.¹ Such cases may overlap clinically as well as histopathologically with Inflammatory Linear Verrucous Epidermal Naevus.²

Blaschko Lines, originally described by A. Blaschko in 1901 represent an invisible system of lines on human skin, which many linear naevi and dermatoses follow. The cause of distribution pattern of these lines is unknown. It is possibly a form of human mosaicism, in which certain specific cells or groups of cells behave differently from other cells due to chromosomal abnormalities.³ Treatment of such cases of psoriasis is the same as for that of localized psoriasis.

CASE REPORT

A 29 years old male presented with three years history of non-pruritic, non-discharging, erythem-atous, papulosquamous lesions over left side of abdomen (Fig-1) and antero-lateral aspect of left thigh (Fig-2). It was revealed by the patient that since onset, the lesions are persistent and confined to the same sites. However, the lesions vary in intensity, have never cleared up completely and respond to the treatment partially and only temporarily. There was no present or past history of similar lesions at any other site of the body. There was no history of injury or any other previous eruption at the site of present lesions. There was no history of psoriasis or any other skin disease in the family.

The lesions were arranged along Blaschko Lines over left side of anterior abdominal wall and antero-lateral aspect of left thigh. No other dermatological lesions were present at any other site of the body. His hair, nails and oral mucosa were spared. There was no joint involvement. Systemic examination did not reveal any abnormality. Anti Human Immunodeficiency Virus antibodies were negative and routine laboratory investigations were within normal limits. Histopathology of the lesions was consistent with psoriasis. Immunohistochemical studies could not be carried out due to non-availability of the facilities.

The patient was prescribed a combination of topical steroids and keratolytics to which he responded partially. The erythema subsided and scaling became less marked. He was advised to have regular follow ups.

Fig-1: Lesions over left side of abdomen

Fig-2: Lesions over antero-lateral aspect of left thigh

DISCUSSION

Psoriasis is a genetically determined, inflammatory and proliferative disorder, commonly presenting as sharply demarcated, erythematous and scaly plaques, predominantly over extensor surfaces of the body. Atypical forms and unusual localizations of the disease are quite frequently seen. However, unilateral psoriasis arranged along Blaschko Lines or in linear bands is extremely rare ⁴.

Many congenital and naevoid skin disorders follow the lines of Blaschko. Common acquired conditions also sometimes follow these lines⁵, in addition to typical lesions of the disease elsewhere on the body. Linear lesions in such cases usually result from isomorphic effect⁶. There has always been a debate over existence of isolated, unilateral lesions of psoriasis and many consider such lesions a form of Inflammatory Linear Verrucous Epidermal Naevus. In fact, from a clinical and histological point of view, Inflammatory Linear Verrucous Epidermal Naevus and unilateral linear lesions of psoriasis overlap⁷. Involucrin expression in the parakeratotic epidermis distinguishes psoriasis from Inflammatory Linear Verrucous Epidermal Naevus⁸. Assessment of elastase-positive cells and that of Keratin –16 and Keratin-10 provide additional diagnostic impact in differentiating between Inflammatory Linear Verrucous Epidermal Naevus and linear psoriasis².

Like common forms of localized psoriasis, unilateral psoriasis along Blaschko Lines respond to topical steroids, keratolytics and calcipotriol, but only temporarily⁶.

Patients presenting with unilateral, localized psoriasis should be examined thoroughly to find out lesions of psoriasis elsewhere. If available, immunohistochemical studies should be carried out to differentiate such lesions from Inflammatory Linear Verrucous Epidermal Naevus. It is further suggested that such patients should be followed up regularly.

REFERENCES

1. Atherton DJ, Kahana M, Russell-Jones R. Naevoid psoriasis. *Br J Dermatol* 1989; 120(6):837-41.
2. de Jong E, Rulo HF, van de Kerkhof PC. Inflammatory Linear Verrucous Epidermal Naevus (ILVEN) versus linear psoriasis. A clinical, histological and immunohistochemical study. *Acta Derm Venerol* 1991; 71(4):343-6.
3. Jackson R. The lines of Blaschko: a review and reconsideration: observations of the cause of certain unusual linear conditions of the skin. *Br J Dermatol* 1976; 95(4):359-60.
4. Ghorpade A. Linear naevoid psoriasis along lines of Blaschko. *J Eur Acad Dermatol Venereol*. 2004 Nov; 18(6):726-7.
5. Grosshans EM. Acquired blaschkolinear dermatoses. *Am J Med Genet* 1999; 85(4):334-7.
6. Cinarte M, Fernandez-Redondo V, Toribio J. Unilateral psoriasis: a case individualized by means of involucrin. *Cutis* 2000; 65(3):167-70.
7. Saraswat A, Sandhu K, Shukla R, Handa S. Unilateral linear psoriasis with palmoplantar, nail and scalp involvement. *Pediatr Dermatol*. 2004;21(1):70-3
8. Ito M, Shimizu N, Fujiwara H, Maruyama T, Tezuka M. Histopathogenesis of inflammatory linear verrucous epidermal naevus. *Arch Dermatol Res* 1991; 283:491-9.

Address for Correspondence:

Maj. Naeem Raza, Consultant Dermatologist, Combined Military Hospital, Abbottabad

Email: naemraza561@hotmail.com