

Acquired Blaschkoid dermatitis

P. Mercy, A. Ghorpade, M. N. Das, A. Soud, S. Puttoo, D. Sharma, A. Jain

Department of Dermatology, Venereology and Leprosy, JLN Hospital and Research Center, Bhilai Steel Plant, Bhilai, Chhattisgarh, India

Address for correspondence: Dr. A. Ghorpade, 1-B, Street 13, Hospital Sector, Bhilai, Chhattisgarh - 490 006, India. E-mail: draghorpade@yahoo.com

ABSTRACT

Acquired Blaschkoid dermatitis characterised by unilateral relapsing inflammatory disease along the lines of Blaschko. A 40-year-old Indian male presented with unilateral erythematous, itchy grouped papules on the left side of the chest, abdomen, back and left arm of 15 days duration. The eruption stopped abruptly at the midline of the torso, completely sparing the right side of the body. The lesions were arranged in whorls and streaks corresponding to the lines of Blaschko. Skin biopsy showed hyperkeratosis and features suggestive of sub-acute spongiotic dermatitis with lymphocytic infiltrate around the blood vessels in the dermis. Patient was diagnosed as a case of Blaschkoid dermatitis. To the best of our knowledge, this is the first case of this condition being reported from India.

Key Words: Lines of Blaschko, Acquired Blaschkoid dermatitis

INTRODUCTION

Acquired Blaschkoid dermatitis was first described by Grosshan's and Marot^[1] in 1990, with unilateral relapsing inflammatory lesions along the lines of Blaschko. Histopathological examination showed spongiotic dermatitis. It was considered a new entity and was called "Blaschite de adulte." Masaad Megahed *et al*,^[2] reported a case of linear dermatosis along the lines of Blaschko and termed it as "acquired relapsing self-healing Blaschko dermatitis." This condition has been rarely described in world literature.

CASE REPORT

A 40-year-old Indian, a resident of Bhilai, presented with unilateral erythematous, itchy skin lesions on the left side of the chest, abdomen, back and left arm for 15 days. The eruption stopped abruptly at the midline of the torso, completely sparing the right side of the body. The lesions were arranged in whorls and streaks corresponding to the lines of Blaschko [Figure 1]. They consisted of grouped and discrete erythematous papules varying in size from 1-4 mm in diameter. The lesions on the left upper limb had mild scaling. Both the palms were spared. He had no associated systemic



Figure 1: Whorls of grouped and discrete papules on the left side of trunk along lines of Blaschko

diseases. There was no previous history of any other skin lesions. Routine hematological, liver and kidney function tests were within normal limits. Zosteriform lichen planus, adult lichen striatus and relapsing linear acantholytic dermatitis were included in the differential diagnosis. A biopsy specimen taken from a papule on the arm showed hyperkeratosis and features suggestive of sub-acute spongiotic dermatitis

How to cite this article: Mercy P, Ghorpade A, Das MN, Soud A, Puttoo S, Sharma D, *et al*. Acquired Blaschkoid dermatitis. *Indian J Dermatol Venereol Leprol* 2007;415-6.

Received: April, 2006. **Accepted:** October, 2006. **Source of Support:** Nil. **Conflict of Interest:** None declared.

with lymphocytic infiltrate around the blood vessels in the dermis. It was diagnosed as a case of Blaschkoid dermatitis. The patient was given oral prednisolone 30 mg daily tapered over 6 weeks, topical hydrocortisone butyrate 1% cream and tablet cyproheptidine 4 mg once daily for 6 weeks, with significant clearance of the lesions and reduction in itching in 6 weeks, though lesions at a few sites are still relapsing, 10 weeks after the first visit.

DISCUSSION

The lines of Blaschko were first described and drawn by Alfred Blaschko in 1901. In contrast to dermatomes, these lines form a V-shape over the spine and S-shape on the lateral and anterior aspect of the trunk. On the limbs, the lines run in a perpendicular direction and on the abdomen, they form whorls. The embryological basis of distribution pattern of these lines is so far an enigma.^[3] Blaschko lines represent a form of 'mosaicism', where two or more genetically distinct cell populations are present in an individual derived from a single zygote.^[3,4] These are distinct from the other known linear patterns of the skin, and do not relate to any vascular or lymphatic structures, but represent developmental growth pattern of the skin.^[5] Many nevoid and acquired skin conditions follow the lines of Blaschko. They include incontinentia pigmenti, focal dermal hypoplasia, epidermal nevus, sebaceous nevus, lichen nitidus, lichen planus, lichen striatus, lupus erythematosus, vitiligo and psoriasis.^[3,4,6-10]

Neither the etiology nor the pathogenesis of this rare dermatosis is completely understood. Several previously

reported cases of Blaschko dermatitis did not respond to topical steroids but responded to systemic steroid therapy.^[6] It has been found that the condition relapsed especially at times of stress. This report is to create awareness about this disease, which may be missed or mistaken for some more common skin conditions.

REFERENCES

1. Grosshans E, Marot L. Blaschkitis in adults. *Ann Dermatol Venereol* 1990;117:9-15.
2. Megahed M, Reinauer S, Scharffetter-Kochanek K, Milde P, Hölzle E, Goerz G, *et al.* Acquired relapsing self-healing Blaschko dermatitis. *J Am Acad Dermatol* 1994;31:849-52.
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;95:349-60.
4. Bologna JK, Orlow SJ, Glick SA. Lines of blaschko. *J Am Acad Dermatol* 1994;31:157-90.
5. Harper JL. Genetics and genodermatosis. *In: Champion RA, Burton JC, Burns DA, Breathnach SN, editors. Rook/Wilkinson/Ebling Text book of dermatology, 6th ed. Blackwell Science: Oxford; 1998. p. 360-1.*
6. Lee HJ, Kang WH, Hann SK. Acquired Blaschko dermatitis: Acquired relapsing self-healing Blaschko dermatitis. *J Dermatol* 1996;23:639-42.
7. Kabbash C, Laude TA, Weinberg JM, Silverberg NB. Lichen planus in the lines of Blaschko. *Pediatr Dermatol* 2002;19:541-5.
8. Taieb A, el Youbi A, Grosshans E, Maleville J. Lichen striatus: A Blaschko linear acquired inflammatory skin eruption. *J Am Acad Dermatol* 1991;25:637-42.
9. Katz M, Weinrauch L. Differentiating vesicular linear lichen planus and lichen striatus. *Cutis* 1987;40:151-3.
10. Ghorpade A. Linear naevoid psoriasis along lines of Blaschko. *J Eur Acad Dermatol Venereol* 2004;18:726-7.