Lichen planus–like dermatosis with Blaschko line distribution: a case report

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SUMMARY

The authors describe the case of a healthy 46-year-old woman with a unilateral linear papular band on the left side of the trunk that followed the lines of Blaschko from the lower back extending to the left anterior side of her abdomen. The lesions were flat-topped, slightly elevated, violaceous, agglomerated lichenoid papules. The biopsy specimen demonstrated the typical histology of lichen planus. A working diagnosis of linear lichen planus was confirmed. Because congenital and/or nevoid skin disorders in a blaschkolinear distribution may have a delayed onset after birth, these lesions must be differentiated from acquired dermatoses following the lines of Blaschko. This distinction should be made in cases with isolated lesions, such as the case presented here.

KEY WORDS

lichen planus linearis, blaschkolinear dermatosis

Introduction

Because congenital and/or nevoid skin disorders in a blaschkolinear distribution may have a delayed onset after birth, these lesions must be differentiated from acquired dermatoses following the lines of Blaschko. Most often the acquired dermatoses, such as psoriasis and lichen planus, exhibit a linear distribution along with scattered lesions. However, cases with isolated lesions have also been described, such as the case presented here (1, 2).

Case report

A healthy 46-year-old woman had a 4-month history of a pruritic skin eruption involving the lower left part of her back and the left anterior side of her abdomen. She presented to the dermatology department at the Vojvodina Medical Center in December 2007 with no significant personal or family history. A review of systems for symptoms of infection was negative.

On physical examination the patient exhibited a unilateral linear papular band on the left side of the trunk that followed the lines of Blaschko from the lower back extending to the left anterior side of her abdomen (Fig. 1). The lesions were flat-topped, slightly elevated, violaceous, agglomerated lichenoid papules.

Laboratory tests including a complete blood count, elementary biochemistry, liver and kidney function tests, and serologies for hepatitis B and C viral infections were performed; the results were within normal limits. An amalgam dental filling was removed from her teeth, as was a silver contraceptive device from her uterus.

A working diagnosis of linear lichen planus (LLP) was made, and a punch biopsy was performed. The biopsy specimen demonstrated the typical histology of lichen

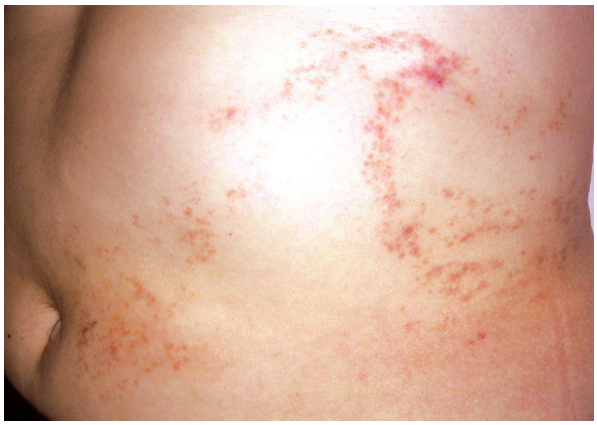

Figure 1. Clinical picture of lichen planus linearis.

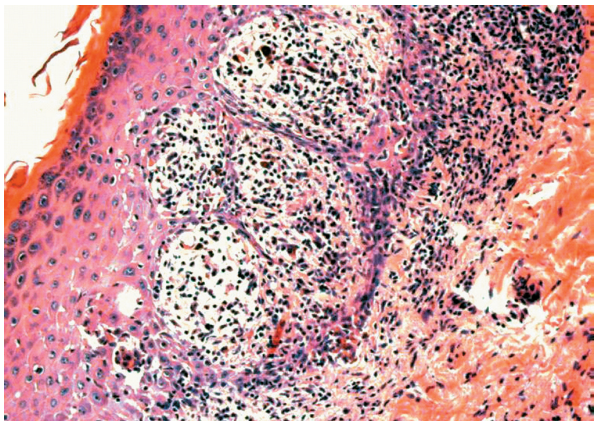

Figure 2. Histological findings in the same patient, corresponding to lichen planus, 200×.

planus (Fig. 2). The histological picture indicated the presence of hyperkeratosis, hypergranulosis, acanthosis, and vacuolar degeneration of the basal cell layer (Fig. 2).

Discussion

Lichen striatus should be the first condition considered in the clinical differential diagnosis of LLP. It is very important that any diagnosis of a very rare form of linear lichen planus be confirmed by histological examination of biopsy specimens. The main difference between lichen planus in linear form and lichen striatus is the presence of hypergranulosis and acanthosis with the absence of parakeratosis (3). Our histological specimen showed hyperkeratosis, hypergranulosis, and acanthosis without parakeratosis. This finding confirmed the histological diagnosis of linear lichen planus. A similar LLP case on the face has been described as linear lichen planopilaris (4).

In line with the literature dealing with these conditions, we speculate that the blaschkolinear distribution of an acquired dermatosis seen in our case is an argument in favor of an embryonic somatic mutation of the keratinocytes, and intolerance to an abnormal clone hidden in these lines (5–7). Moreover, we also agree that not only epithelial cells, but other cells may also be affected (7).

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