Lichen Striatus on an Adult

Arzu Ataseven¹, Perihan Ozturk², Ilknur Kucukosmanoglu³

¹Department of Dermatology, Konya Education and Research Hospital, Konya, Turkey
²Department of Dermatology, Kahramanmaras Sutcuimam University, Kahramanmaras, Turkey
³Department of Pathology, Konya Education and Research Hospital, Konya, Turkey

Abstract

Lichen striatus is a well-known, acquired, self-healing, linear inflammatory dermatosis. Its etiology remains unclear. It rarely affects adults, and it is characterized by abrupt onset of coalescent papules, in a linear disposition, usually on the extremities. It is usually localized and asymptomatic; however, when the onset occurs in adulthood, patients may experience widespread lesions and pruritus. The lesions are located on extremities and less commonly on the trunk, and they follow the developmental lines of Blaschko. Histopathology findings indicate both lichenoid and spongiotic dermatitis. The therapeutic approach usually used is topical steroids. It is reported here the case of an adult woman with erythematous violaceous papules on the left leg, diagnosed with lichen striatus by clinical and histopathological correlation.

Key Words: Lichen striatus, blaschkitis, adult.

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Corresponding Author: Arzu Ataseven, Department of Dermatology, Konya Education and Research Hospital, Konya, Turkey
E-mail: arzuataseven@hotmail.com
Introduction

Lichen striatus (LS) is an uncommon dermatosis, generally self-limited, that affects mainly children, being rare reports in adults [1]. Its most characteristic feature is the linear arrangement of slightly raised, lichenoid, pink-red papules. They may coalesce into small plaques and into a continuous or interrupted linear band. Most commonly the lesions are located on a proximal extremity and less commonly on the trunk, and they follow the developmental lines of Blaschko [2]. The average duration of the disease is 9 months, and subsequently the lesions spontaneously regress [3]. Its etiology is unknown but it is considered, by many authors, as a manifestation of mosaicism, characterized by the presence of clones of epithelial cells genetically abnormal that through a precipitating event can be recognized by the immune system and induce the affected skin to generate an inflammatory response T-cells mediated, apparent in Blaschko lines [4].

Case report

A 40-year-old woman presented with a 4-month history of an asymptomatic linear erythematous papular crusted lesion which spread from her left leg (Figure 1).

**Figure 1.** Yellow-brown keratotic papules on the right side of his trunk.
The patient was asymptomatic and otherwise completely healthy. Laboratory tests were normal. A biopsy specimen showed hyperkeratosis, acanthosis, focal parakeratosis, zonal hypergranulosis, exocytosis, vacuolar degeneration on basement membrane, perivascular and lichenoid lymphocytic infiltration and necrotic keratinocytes (Figure 2). The linear eruption was diagnosed as LS, based on clinical and histological characteristics. The patient was treated with a topical corticosteroid cream.

**Fig 2.** Hyperkeratosis, papillomatosis, acanthosis, suprabasal cleft formation, perivascular and lichenoid lymphocytic infiltration, dyskeratotic keratinocytes.

**Discussion**

Lichen striatus is mostly seen in young and it is rare in adults. The linear eruption of inflammatory lesions such as erythematous papules, sometimes vesicles, and even eczematous lesions appears over 2 to 3 weeks [2]. LS usually presents as a single linear lesion [5].

The etiology of these dermatoses is unknown, although they have been associated with a personal or family history of atopy. Triggering factors have been identified, such as infections, vaccines, pregnancy, stress, drugs, skin trauma, and contact dermatitis [6].

Inflammatory linear lesions which follow the lines of Blaschko have a variety of clinical and histological appearances, and may resemble LS, linear lichen planopilaris, linear morphea, linear psoriasis, linear Darier’s disease, linear lichen nitidus and linear contact dermatitis [7]. Differential diagnosis between LS and other inflammatory linear lesions are essential, and
based on histopathology. Histopathological findings such as dense perivascular and lymphocytic infiltrate around the hair follicles, eccrine glands and ducts favor the diagnosis of LS [8]. In our case, perivascular lymphocytic infiltration was present which ensures the diagnosis of LS.

The therapeutic approach usually adopted is topical steroids. Campanati A et al used topical application of pimecrolimus 1% cream twice daily for 6 weeks, or until complete disappearance of the cutaneous lesions [9]. Topical tacrolimus [3], and short course of low-dose systemic corticosteroid [8] have been applied to LS. In our case, topical corticosteroid cream was administered.

**Conclusion:**

LS should to remember in the differential diagnosis of linear inflammatory lesions.

**References**