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Case Report

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Unilateral, Multiple Lichen Striatus in a Pregnant Woman

Ezgi Ünlü,[1]* MD, Servet Güreşçi,[2] MD

Address: [1]Department of Dermatology, Zekai Tahir Burak Women's Health Education and Research Hospital, Ankara, [2]Department of Pathology, Kecioren Training and Research Hospital, Ankara, Turkey

E-mail: drezgiyalcin@yahoo.com

** Corresponding Author:* Ezgi Ünlü, MD, Department of Dermatology, Zekai Tahir Burak Women's Health Education and Research Hospital, Ankara, Turkey

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Abstract

Observation: Lichen striatus is a self-limitig inflammatory dermatosis characterized with erythematous papules that follows the lines of Blaschko. It usually occurs in childreen between the ages of 5-15 years, and rarely in adults. The lesions are mostly unilateral and asymptomatic, and localized on extremities. Trunk, neck and facial involvement are less frequent. Histopathologically; hyperkeratosis, acanthosis, focal parakeratosis, dyskeratotic keratinocytes in the epidermis and band-like lymphocytic infiltration in the dermis are observed. We present a case of multiple lichen striatus on the right thigh and arm occuring at 30 weeks of pregnancy. In our knowledge, this is the second case of liken striatus presented in a pregnant woman.

Introduction

Lichen striatus is an acquired linear dermatosis with an unknown etiology [1]. It affects mainly childreen but adult cases have been reported [2]. It is characterized with unilateral, asymtomatic, erythematous, flat topped papules following Blaschko lines on a single part of the body [1]. Atopy and genetic predisposition are thought to be the main factors of etiology [3]. Trauma, viral infections and vaccination are suggested as precipitating factors in the etiopathogenesis of the disease [1, 3, 4, 5]. We reported the second case in a pregnant woman in the literature.

Case Report

A 20-year-old woman presented with 5 months before onset of mild pruritic, brownish and erythematous papules on her right thigh and arm when she was in the third trimester (30 weeks) of her first pregnancy. The initial lesions appeared on her right thigh and over the following 2 weeks the eruption had spread to her right arm. She was in

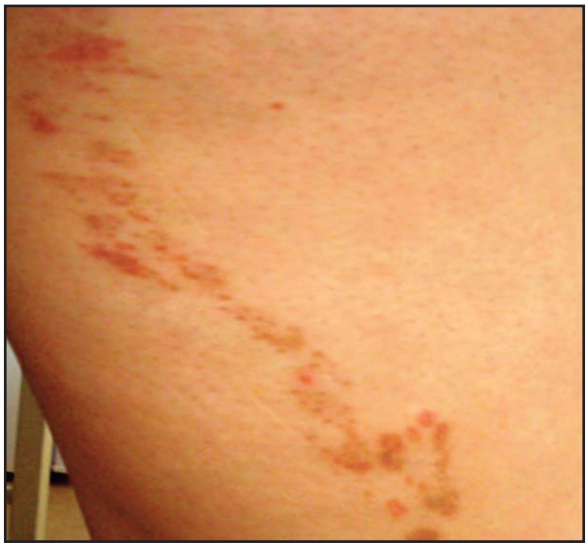

Figure 1. Erythematous, flat topped papules and hiperpigmented macules in a linear arrengement along lateral side of the right thigh from gluteus to knee.

good health. There was no history of atopy. Her family history was unremarkable.

On physical examination, erythematous, flat topped papules and hiperpigmented macules were observed in a linear arrengement along the lateral side of the right thigh from gluteus to knee (**Figures 1**)and her right upper extremity from axilla to upper arm. There was no involvement of oral-genital mucosa and nails.Routine laboratory tests were normal.Histopathological examination of incisional biopsy specimen of the papules revealed focal parakeratosis, acanthosis and necrotic keratinocytes in the epidermis. Band-like lymphohistiocytic infiltration was observed in the papillary dermis (**Figure 2**). The infiltrate was marked around hair follicles.Clinical and histopathological findings were consistent with liken striatus. Because of multiple lesions and mild pruritus, topical corticosteroid oinment was started and the patient was kept under follow-up.

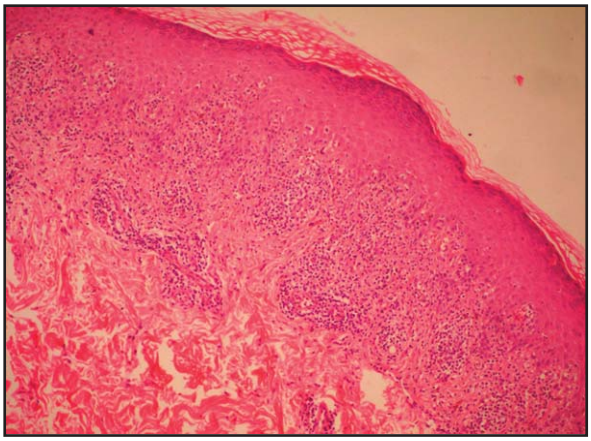

Figure 2. Band-like lymhohistiocytic infiltration in the papillary dermis (HEX100)

Discussion

Lichen striatus is an acquired, linear dermatosis characterized with erythematous papules. The distribution of the lesions corresponded to the lines of Blaschko. It is mainly asymtomatic in childreen but in adults the lesions tend to be more itchy [**6**]. The disease is more common in women [**2**]. Although the main localization is extremities, trunk and face involvement have been described [**2, 7**]. The eruption is mostly localized on a single part of the body, multiple lesions are so rare [**8**]. In our case, the lesions are observed on the right upper and lower extremities. Nail involvement of the disease is rare, but when present tend to be persist longer than the skin eruption. It is mostly diagnosed on the nails of hand. Nail abnormalities may include nail-bed hyperkeratosis, pitting, longitudinal ridding, shredding, punctate leuconychia, striate leuconychia, onycholysis and logitudinal fissuring [**9**].

Histopathologically, acanthosis, focal parakeratosis and spongiosis, necrotic keratinocytes in the epidermis and band-like infiltration of lymphocytes in the dermis are observed [**1**]. It may be difficult to differentiate lichen striatus from lichen planus. Histopathological features are useful for differentiation of these diseases. Intercellular edema, focal parakeratosis, lymphohistiocytic infiltration with deep and superficial adnexal involvement are present in lichen striatus [**10**]. Lichen planus differentiate itself from lichen striatus for being more pruritic and involving oral-genital mucosa.

The etiopathogenesis of the disease is unknown. It is thought to be a cutaneous mosaisism due to a postzigotic somatic mutation. It is characterized with the presence of abnormal clones of keratinocytes [**1**]. Some enveronmental factors such as trauma, viral infections, BCG and HBV vaccinations have been reported as precipitating factors [**1, 3, 4, 5**]. These factors may induce the loss of immunotolerance towards keratinocytes resulting in a T-cell mediated inflammatory reaction. In our knowledge, in the literature only one case of lichen striatus occuring in the third trimester of pregnancy have been reported. Pregnancy was reported as a precipitating factor for lichen striatus due to triggering an autoimmune response [**7**]. In our case, there was no other precipitating factor except pregnancy.

Lichen striatus tend to be improved within 9 months spontaneously [**8**]. If the lesions are pruritic and don't regress for a long time, topical corticosterod oinment or calcineurin inhibitors are applied.

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