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Case Report
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ILVEN with Guttate Psoriasis in Two Cases: Does ILVEN Cause a Tendency to Develop Psoriasis?

Düriye Deniz Demirseren,[1] MD, Tamer İrfan Kaya,[2] MD, Ümit Türsen,[2] MD

Address: [1]Department of Dermatology, Ataturk Training and Research Hospital, 06800, Ankara, [2]Department of Dermatology, Mersin University Faculty of Medicine, Mersin , Turkey

E-mail: ddemirseren@yahoo.com

** Corresponding Author:* Dr. Duriye Deniz Demirseren, Ataturk Training and Research Hospital, Department of Dermatology, Bilkent way, 06800, Ankara, Turkey

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Abstract

Observation: Linear psoriasis which is a rare form of psoriasis is similar to ILVEN (Inflammatory linear verrucous epidermal nevus) clinically and histopathologically. Guttate psoriasis is the type of psoriasis with 1.5-1.5 cm plaques on the trunk and extremities. We present two cases having ILVEN lesions from early childhood and who develop guttate psoriasis in adulthood.

Introduction

Inflammatory linear verrucous epidermal nevus (ILVEN) shows genetic mosaicism like other nevi and always follows Blaschko Lines. Linear psoriasis which is a rare form of psoriasis is similar to ILVEN clinically and histopathologically [**1**]. Guttate psoriasis is the type of psoriasis with 1.5-1.5cm plaques on the trunk and extremities. Guttate psoriasis has a trigger factor and heals more rapidly than chronic plaque psoriasis with treatment after elimination of this factor. Psoriasis develops with trigger factors among genetically predisposed patients. Activation of immunologic mechanisms, abnormality of antiinflammatory mechanisms and hyperactivity of keratinocytes are responsible for this [**2**]. We present two cases having ILVEN lesions from early childhood and who develop guttate psoriasis in adulthood.

Case Report

Case 1. Sixty years old male patient using interferon treatment for hepatitis B was referred for newly developed erythematous lesions to dermatology clinic (**Figure 1**). Guttate erythematous and squamous papules and plaques were detected on the extremities and trunk. Patient was clinically diagnosed as guttate psoriasis because of presence of typical psoriasis lesions with positive Auspitz sign. Patient also had linear erythematous and squamous lesions on his left arm since early childhood, which was a biopsy confirmed ILVEN (**Figure 2**). Although the psoriatic lesions are widespread systemic immunosupressive treatment options were not started because the patient was hepatitis B antigen positive. As the hepatic function tests of the patient were within normal limits, he was treated with low dose (25mg/day) acitretine after the gastroenterology consultation. Interferon therapy was completed and terminated. In 3 months of acitretin treatment the psoriasis lesions were completely disappeared, although ILVEN leions showed good response to acitretin treatment,

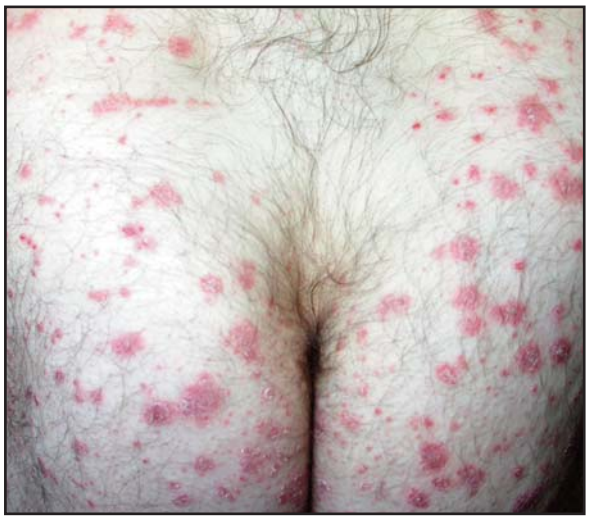

Figure 1. Guttate erythematous and squamous papules and plaques

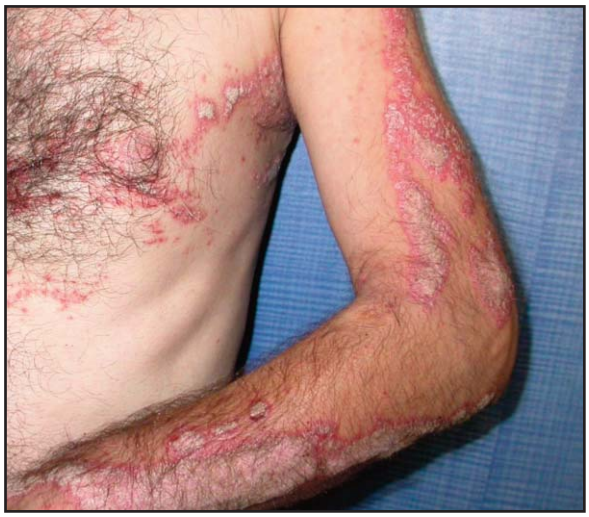

Figure 2. Linear erythematous and squamous lesions on his left arm

they did not heal completely (**Figure 3**). After completion of retinoids ILVEN recurred but there was not recurrence of psoriasis for 10 years. As the patient was satisfied with the response rate of the ILVEN lesions to this treatment, we have intermittantly prescribed acitretin for the treatment of ILVEN to the patient.

Case 2. Nineteen years old male patient was referred to our clinic because of erythematous and squamous lesions on the trunk and extremities (**Figure 4**). Patient had extensive guttate erythematous and squamous papules and pustules on the trunk and extremities as well as he had linear erythematous and squamous plaques on the right leg from early childhood. Patient had a history of upper respiratory tract infection a few weeks ago. He was diagnosed as guttate psoriasis clinically and biopsy taken from the leg was consistent with ILVEN. He was given 15mg/week methotroxate. Psoriasis lesions were completely healed within 4 months but ILVEN lesions showed only minimal response to methotrexate).

Discussion

Psoriasis is a chronic inflamatory skin disease with a strong genetic basis, which can be triggered by different environmental factors. Guttate psoriasis is charecterized by eruption of small (0.5 to 1.5 cm in diameter) papules and plaques over the trunk and proximal extremities. This clinical form of psoriasis is also known as “eruptive psoriasis” and can be associated with psoriasis triggering factors. Streptococcal throat infection frequently precedes or is concomitant with the onset of the flare of guttate psoriasis. The existence of a linear form of psoriasis distinct from ILVEN is controversial [**3**].

ILVEN is an epidermal nevus which is similar to psoriasis clinically and histopathologically and may respond to classical antipsoriatic treatment. Differentiation of ILVEN and linear psoriasis is still unclear. ILVEN is thought to provide fertile sites for the development of epidermal nevus as a result of post zygotic mutation [**4**]. *Visses* et al. have differentiated ILVEN from psoriasis by immunohistochemical methods. ILVEN shows lower Ki-67 expression and higher keratine 10 + cells and HLA-DR expression compared to psoriasis. Additionally DC8+, CD45RO+ and CD2+, CD94 and CD16 expressions are found to be different between ILVEN and psoriasis patients[**5**]. *Welch* et al. comparing immunohistochemical properties have shown that ILVEN and epidermal nevus developed with different mechanisms [**6**].

Hofer has grouped the two diseases as;

1. ILVEN with or without psoriasis and which partially responds to antipsoriatic and anti-inflammatory treatment.

2. ILVEN without psoriasis

3. Together with linear psoriasis and psoriasis

4. Without linear psoriasis and psoriasis

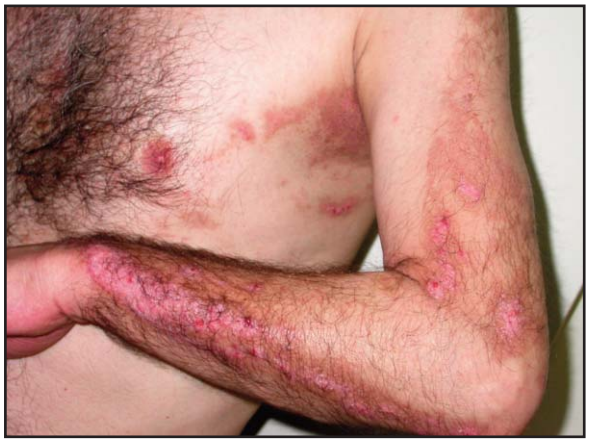

Figure 3 . Linear erythematous and squamous lesions showed partial response

The last three groups respond to antipsoriatic treatment but the first group has partial response [7].

Psoriasis may be triggered by infections, drugs, stress and endocrinologic disorders [3]. We thought that in our first case psoriasis was triggered because of interferon treatment and our second case had a history of upper respiratory tract infection as a possible psoriasis trigger. ILVEN lesions of the first case responded to acitretin partially unlike psoriasis lesions which disappeared totally. Psoriasis lesions healed totally with methotroxate in the second case but ILVEN lesions healed partially. We though that both patients can be put in the first group according to classification of *Hofler*. Both patients had ILVEN since early childhood and they developed guttate psoriasis with triggering factors made us think that there may be a correlation betweeen two diseases.

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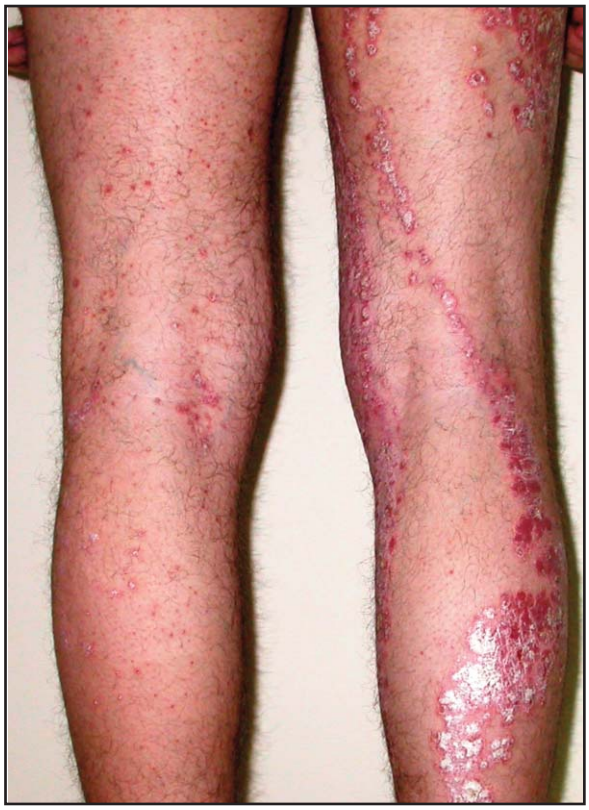

Figure 4 . Erythematous and squamous lesions on the extremities

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