

An Unusual Case of Lichen Striatus Onset Under Dupilumab in a Patient With Alopecia Areata

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Case Presentation

In October 2022 a 15-year-old boy acceded in our Department. He was already our patient for the management of his universal alopecia areata, handled from May 2022 with dupilumab, an anti-IL-4 and IL-13 receptor inhibitor [1]. After 5 months only partial improvement signs of his alopecia areata were detected. However, he showed us a curious skin rash on his lower left limb which had onset in August. Clinical examination revealed pink-red small papules, slightly wrinkled, grouped in plaques and in blasphemoid fashioned distribution, from his left groin to the calf. Due to patient's parents had refused skin biopsy, a clinical diagnosis of lichen striatus (LS) was made (Figure 1). LS is a rare cutaneous eruption of unknown etiology, that has been associated with some conditions like atopic dermatitis and so on.

Teaching Point

Some authors retained that post zygotic somatic mutations of skin cells may determinate the genesis of a mosaicism, presenting different keratinocyte antigens. A mosaicism is that condition marked by the presence of more than one genetic line as a result of a DNA mutation, in a multicellular organism [2]. A blasphemoid eruption may appear, when this clone is target by a not specific immune system response, probably triggered by unknown factors². Dupilumab is able to switch the immune response from a Th2 to a Th1 and Th17 pathway which, in our opinion, may induce autoimmune responses against mosaic cells and thus blasphemoid eruption in predispose patients [1].



Figure 1. (A, B) papules and plaques in blaschkoid distribution, from the left calf to the groin. (C) dermatoscopic evaluation displayed papules and plaques characterized by dotted and linear vessels on a pink-yellow background and faint erythema.

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