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Scabies mimicking relapsing atopic dermatitis

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Abstract

Atopic dermatitis (AD) is a chronic inflammatory skin disease clinically characterized by eczematous skin manifestations; sometimes it can manifest with non-specific clinical features, in common with other skin conditions, such as infectious and neoplastic diseases. We would like to underline the importance of accurate dermatologic examination and rigorous anamnesis in patient affected by AD, in order to avoid misdiagnosis and delayed treatments.

Introduction

Atopic dermatitis (AD) is a chronic inflammatory skin disease which classically affects children, but can also occur in adolescents and adults. It is clinically characterized by erythematous and eczematous skin patches and plaques on flexural areas, trunk, face and hands accompanied by intense itch. (1) AD can reduce the patients' quality of life (QoL), with negative influence on daily activities and sleep. The treatment includes topical and systemic drugs, phototherapy, biologics and Jak-inhibitors, according to the severity of the disease and the impairment of patients' QoL.

Case report

A 20-year-old female patient referred to our dermatology outpatient for an itching eczematous rash. She suffered from atopic dermatitis from childhood, with a progressive worsening during adolescence. The dermatology examination revealed the presence of erythematous papules, scaling patches and eczematous lesions on trunk, extremities and face, accompanied by severe pruritus and impairment of patient's QoL (Eczema Area and Severity Index (EASI):26; pruritus-Numeric Rating Scale (p-NRS): 10; Dermatology Life Quality Index (DLQI): 27). She was previously treated with topical emollients and short courses of systemic steroids with unsatisfactory results. Subsequently, also dupilumab 300 mg was administrated every 15 days with good improvement, but it was interrupted after 5 months for the development of severe conjunctivitis. For this reason, we decided to start a therapy with upadacitinib 15 mg, with a fast clinical response and a reduction of pruritus after only 1 month (EASI: 10; pruritus NRS: 2; DLQI: 3). However, after 3 months of treatment, a clinical worsening was observed, with an apparent relapse of AD. In fact, the clinical examination revealed the presence of erythematous papules, excoriations, oozing and crust on hands, buttocks, nipples, armpits and abdomen (*Fig 1A*). The patient complained of intense itching with sleep disturbance, without response to systemic antihistamines. In addition, burrows were observed on interdigital areas of the hands and wrists, suggesting the hypothesis of scabies. The patient reported similar signs and symptoms in family members. The diagnosis was confirmed demonstrating the presence of mites and eggs from scrapings of the cutaneous lesions and direct microscopy (*Fig.2*)(2). Topical permethrin 5% and oral ivermectin were administered with a complete resolution of clinical manifestations and pruritus (*Fig 1B*).

Discussion

Scabies is a mite infestation caused by *Sarcoptes scabiei*, which is characterized by intense pruritus and presence of papules and burrows on the interdigital spaces of the hands, axillae, wrists, buttocks, and genitalia. The presentation of scabies can mimic other skin conditions, making it tricky to diagnose and leading to possible outbreaks. (3) Also AD can sometimes manifest with non-specific clinical features, which can be in common with other skin conditions, such as inflammatory, neoplastic or infectious diseases. (1,4)

Conclusions

The aim of this case report is underling the importance of accurate dermatologic examination and rigorous anamnesis in patient affected by AD, in order to avoid misdiagnosis and delayed treatments, without interrupting an effective underling therapy with an aggravation of dermatologic disease (5) and, in case of infectious condition, also a possible spread to family and close contacts.

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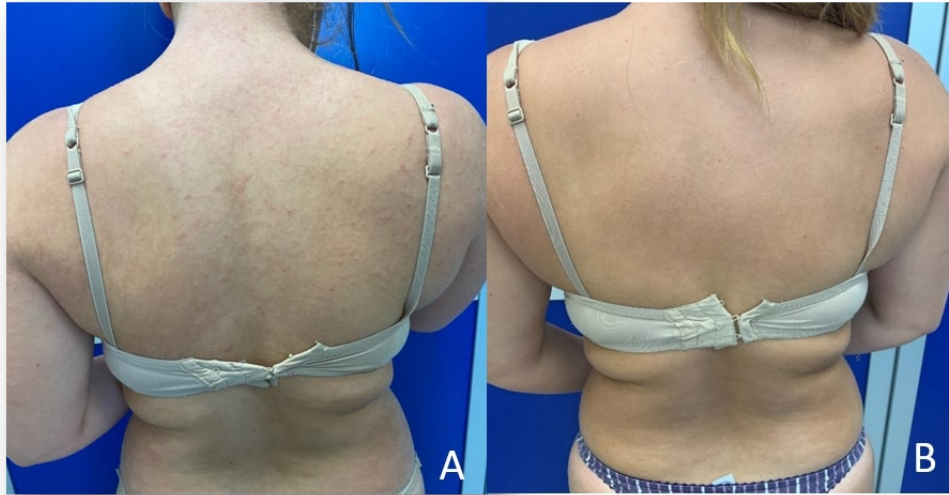


Figure 1. A. 20-year-old female patient with apparent disease relapsing of atopic dermatitis 3 months after starting Upadacitinib. B. Clinical improvement after topical permethrin 5% and oral ivermectin therapy.



Figure 2. Scabies mites from direct microscopy examination (magnification x40). The sample from cutaneous scraping is placed on a slide and some drops of 10% potassium hydroxide are added. Then, the sample is analysed under a microscope for the presence of mites, larvae or ova.