

Scabies Presenting as a Blistering Eruption

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Several diseases may be confused with scabies. Vesicular and bullous eruptions have been reported in patients with several bullous conditions. Under such circumstances, scabies can trigger or exacerbate a subjacent autoimmune condition. We report the case of a 35-year-old man who developed a vesicular eruption in the course of a scabies outbreak, and we discuss the differential diagnosis of this atypical presentation.

Scabies is a very common pathology, but its diagnosis can be difficult. Inadequate treatments can result in “scabies incognita”; however, an abnormal acute immune response by the host can lead to blistering eruptions, which adds to the differential diagnoses. We report the case of a widespread vesicular eruption and discuss the differential diagnoses.

Case Report

A 35-year-old man presented with a 60-day history of a generalized itchy papular rash arising on the limbs and spreading to the trunk. Before the office visit, the man’s lesions transformed into a blistering rash, particularly on the legs. Results of a physical examination showed scabietic burrows, linear blisters, and scratching marks on the posterior thighs (Figure 1). Routine tests showed normal results. Serologic tests, including tests for syphilis, hepatitis, and retroviruses, gave negative results. Results of standard multitests for cellular immunity (ie, tetanus, diphtheria, streptococcus, proteus, tuberculin, glycerol, candidin, trichophytin) were

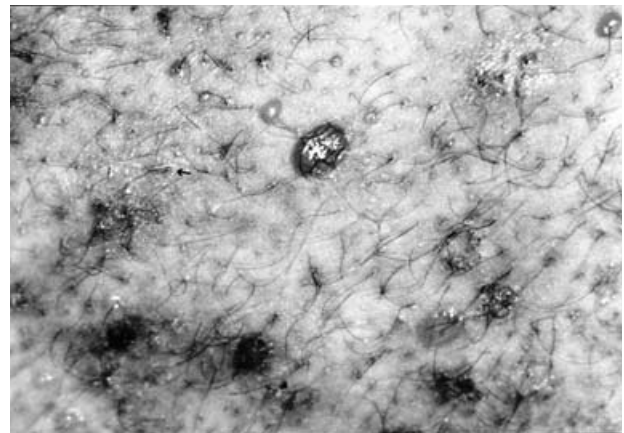


Figure 1. Small vesicles and blisters on the legs. Note the presence of linear vesicles (arrow).

within normal ranges. The serum IgE level was 150 U/mL (normal, ≤ 130 U/mL).

A skin biopsy specimen showed a subepidermal vesicle containing eosinophils and fibrin along with perivascular eosinophilic infiltration of the dermis (Figure 2). Results of direct and indirect immunofluorescence were negative. A diagnosis of scabies was made, and the patient was treated with benzyl benzoate, which resulted in rapid resolution of the lesions.

Comment

Blistering lesions can be seen in patients with a severe immune response to scabies infection.¹ The size, shape, and number of lesions are variable. The lesion(s) may be a single tense bulla²; small vesicles grouped in areas previously affected by dermatitis³; generalized vesicular eruptions (eg, the present case); or severe pemphigoidlike eruptions.^{4,6}

In some reports, scabies mimics or exacerbates immune diseases such as bullous pemphigoid,^{7,8} linear IgA dermatitis,⁹ and bullous hereditary dystrophic epidermolysis.¹⁰ Scabies may be able to

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Figure 2. Subepidermal vesicle with eosinophils and fibrin. Note the eosinophilic infiltration of perivascular dermis (H&E, original magnification $\times 200$).

trigger some of these cases. In other reports, scabies has been associated with severe immune disease and neoplasia.¹¹

Even in cases of scabies without vesicles, results of histologic examination have shown changes of epidermal spongiosis with exocytosis of eosinophils, as seen with various types of dermatitis.¹² In these patients, differential diagnosis should always include an autoimmune bullous disease in the prodromal phase. Direct immunofluorescence is often necessary to distinguish these diseases.² In our case, scabietic burrows and linear vesicles were evident on examination and confirmed the diagnosis.

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