

Acute Allergic Contact Dermatitis Presenting with Tense Bullous Eruption



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A 29-year-old man presented with a 7-day history of a pruritic bullous eruption following outdoor exposure. He denied using new skin products or topical or oral medications. Physical examination revealed lower extremity bullae over erythematous patches with negative Nikolsky sign (Fig. 1a). Skin biopsy diagnosed allergic contact dermatitis (ACD) (Fig. 1b).

ACD is a hypersensitivity reaction to allergen contact in a sensitized individual. An erythematous rash develops within days, with formation of papules, plaques, and rarely vesicles or bullae. A thorough history may

identify potential allergens.¹ On physical exam, rash distribution corresponds to contact exposure. Skin biopsy is diagnostic and patch testing can identify the allergen. Treatment is with potent topical steroids and, in severe cases, short-term oral steroids.¹

Differential diagnoses include phytophotodermatitis and bullous pemphigoid. Phytophotodermatitis occurs with skin contact to plants containing psoralen (e.g., lime, parsley), followed by ultraviolet light exposure. Contact dermatitis presents within days and bullae develop in severe cases.² Bullous pemphigoid is an autoimmune condition affecting older adults and presents with spontaneous pruritic bullous eruption. Biopsy with immunofluorescence is diagnostic.³

Our patient denied exposure to plants containing psoralens, supporting the diagnosis of ACD. The patient improved with potent topical steroids and a short course of oral steroids.



Figure 1 a Lower extremity vesicles and tense bullae overlying a diffuse erythematous patch. b Histological sections (×10) demonstrate spongiosis of the epidermis (gray arrow) with exocytosis of lymphocytes with a perivascular lymphocytic infiltrate with scattered eosinophils (black arrows), consistent with ACD. Direct immunofluorescence testing (not imaged here) was negative for IgA, IgG, IgM, and C3.

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