

# Itchy blisters on exposed skin

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A woman presents with pruritic blisters, at various stages of evolution, over her limbs. What are they?

## Case history

Over a two-week period, a 23-year-old woman developed blisters over her limbs. The blisters commenced as erythematous papules. There were asynchronous lesions present at different stages of evolution (Figure 1). Skin biopsy showed a large subepidermal blister containing strands of fibrin. The underlying dermis had superficial and deep perivascular and interstitial lymphocytes and eosinophils (Figure 2).

## Differential diagnosis

The differential diagnosis of itchy blisters includes the following lesions.

- **Bullous pemphigoid** often presents as widespread tense blisters that are preceded by urticated erythematous lesions. The blisters are usually not confined to the acral areas and they often coalesce. Skin immunofluorescence, demonstrating linear deposits of IgG and C3 at the basement membrane zone, may be required for definite diagnosis.
- **Bullous impetigo** may be localised to follicular orifices, but it is usually pustular and the blisters readily break to form crusts. Skin biopsy shows

superficial blisters localised beneath the stratum corneum. *Staphylococcus aureus* or streptococci are usually readily cultured.

- **Erythema multiforme** may present as acral blisters and often involves the palms and soles. Early lesions have a targetoid appearance. Skin biopsy shows focal epidermal necrosis with lymphocytes. Eosinophils are uncommon.
- **Insect bites** are the correct diagnosis in this case. They present as a papular urticaria with erythematous papules and a superimposed vesicle that is often excoriated. Blisters are seen more frequently in children or in individuals who have not been previously exposed to the local insects.

## Treatment

Insect bite reactions are usually self-limited as long as exposure has ceased. Symptomatic relief for the intense itching may be provided by topical corticosteroid creams, 0.25% menthol in a cream or lotion base, topical anaesthetic or antihistamine creams used for a limited period. Both DEET (*N,N*-diethyl-*m*-toluamide or *N,N*-diethyl-3-methylbenzamide) or permethrin are effective insect repellents.

## Keypoint

Insect bites characteristically appear as grouped, often asymmetrical, highly pruritic blisters at various stages of evolution. MT



Figure 1. Blisters at different stages on the patient's lower leg.

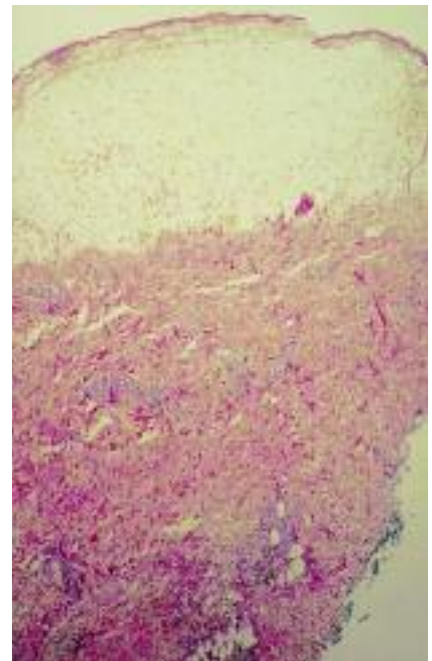


Figure 2. Skin biopsy demonstrating a tense subepidermal blister with superficial and deep dermal inflammation.

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