

# Bullous arthropod bite reaction

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## DESCRIPTION

A 61-year-old woman with a medical history of hypothyroidism presented to the office with blistering skin lesions on bilateral lower legs (figure 1). The lesions first appeared about 5 days prior to her office visit. The patient stated she was bitten multiple times by what she believes were green-head flies. The blisters then began to develop the following day. The lesions were painful and somewhat pruritic. She noted only one other reaction to bug bites like this in the past, about 1 year ago, but says it was not as severe. The patient went to urgent care 4 days prior to the office visit and was given minocycline. Physical exam revealed multiple bullous lesions on the medial/posterior surface of bilateral lower legs.

The patient was treated with a tapering course of oral corticosteroids and instructed on proper wound care with soap and water. She was seen again in the office 2 weeks later with good resolution of her lesions. The patient also had subsequent lab testing which revealed an unremarkable complete blood count. HIV testing was negative.

Insect bites produce an inflammatory or allergic reaction with variable response. Reactions can vary from no reaction to pruritic papules, vesicles or even bullae in some cases. It is thought that the saliva from the bite of the organism serves as an allergen. When there is only limited allergen exposure, the response is typically mild, but when the antigen exposure is

more considerable a vesiculobullous reaction can occur.<sup>1</sup> Bullous-type reaction, or bullous arthropod bite reaction, is a delayed response hypersensitivity reaction occurring in sensitised individuals. The occurrence of a bullous reaction can be common in patients with chronic lymphocytic leukaemia and other haematological cancers.<sup>2</sup> Insect bites should be washed with soap and water to prevent secondary infection. Topical steroids and antihistamines are helpful to manage pruritus.<sup>3</sup>

## Patient's perspective

When the bites first occurred I thought I was having an allergic reaction, but the next morning I woke up with blisters on my legs. I became concerned because of how painful they were, especially first thing in the morning. The blisters were so big. Once I started my prescription I knew I was getting better. Now I just worry that my next reaction could be worse.

## Learning points

- ▶ Bullous reactions to insect bites are not uncommon.
- ▶ Bullous reactions to insect bites can be treated with steroids and patients should be counselled on prognosis.
- ▶ Consider leukaemia and other haematological cancers in patients with bullous reactions as these reactions are more common in patients with these disorders.

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**Figure 1** Bullous skin lesions on bilateral lower legs.



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