Case Report: A 40-Year-Old Man with Ulcerated Skin Lesions Caused by Bites of Safari Ants

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Abstract. We report a 40-year old man in Uganda with ulcerated skin lesions, hypotension, and anaphylaxis caused by bites of safari ants. Treatment was successful. Physicians should be aware of anaphylaxis caused by ant bites.

A 40-year old man came to the emergency department at St. Mary's Hospital-Lacor in Gulu, Uganda. This is a rural hospital with limited resources. He had a history of alcohol abuse and had spent the preceding night sleeping in the bush. While asleep, he had been attacked by safari ants. He was unresponsive and could not provide a medical history. Ants were still visible on his skin (Figure 1A). On examination, there were multiple erosions all over his body (Figure 1A). The patient had a Glasgow Coma Score of 6. His blood glucose level was 13 mg/dL (reference range = 70–100 mg/dL). A complete blood count was normal except for a leukocyte count of $12.4 \times 10^9/L$ (reference range = $4 \times 10^9/L$ – $11 \times 10^9/L$). Biochemical tests were not available.

He was resuscitated with two liters of Ringer's lactate solution, followed by 2.5 liters/24 hours. His hypoglycemia was managed with 20 mL of 50% dextrose. Because the cause

of the hypotension was not known, he was given 200 mg of hydrocortisone intravenously. Dopamine ($5 \mu\text{g/kg/minute}$) was given as an inotropic support agent. After blood cultures were obtained, he was treated with ampicillin and gentamicin. After five days, he improved sufficiently and was discharged. Blood cultures were negative, and we made a diagnosis of anaphylaxis secondary to ant bites with a possible secondary infection.

Safari ants (Figure 1B) (order Hymenoptera, family Formicidae, genus *Dorylus*) (also known as driver ants, army ants, and Siafu) are found in central and eastern Africa and parts of Asia. Each anthill can contain up to 20 million ants. The venom of the ant has a protein component and an alkaloid component. The protein component causes anaphylaxis and the alkaloid component causes painful effects of the ant bite. Systemic (including anaphylaxis) symptoms are more common after multiple bites.¹ Anaphylactic reactions under these circumstances can be fatal.²

FIGURE 1. **A**, Multiple ulcers on the abdomen, shoulders, arms, neck, and head of the patient. Safari ant crawling on the hand and thumb (arrow) of the patient. **B**, Safari ant crawling on the bed sheet. This figure appears in color at www.ajtmh.org.

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