

Black (samsum) ant induced anaphylaxis in Saudi Arabia

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ABSTRACT

Ant allergy is a rare clinical problem that ranges from local to systemic reaction and life-threatening anaphylaxis. Different types of ants including the imported fire ants, the black (samsum) ants, and others, are considered health hazard in many parts of the world. We report a 32-year-old Saudi female from Hafr-Al-Batin in the Northern region of Saudi Arabia, with history of recurrent anaphylaxis following black (samsum) ant stings and we review the related literature. This is the first report of black (samsum) ant allergy in Saudi Arabia.

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Ants are insects of the order Hymenoptera and family Formicidae.¹ Insect sting can cause reactions, ranging from mild local reaction with painful erythematous swelling that subsides within several days through the moderate reactions in the form of generalized urticaria, angioedema and flushing, to the most severe life-threatening anaphylaxis with edema of the airways, bronchospasm, hypotension, and shock.² Most insect sting allergies are associated with bees and wasps, but several species of ant are capable of stinging.³ The ant sting allergy is considered a frequent clinical problem and even health hazard in many parts of the world.² The imported fire ant has been reported and studied extensively, and considered responsible for most of the allergic reactions in Southern United States of America (USA).¹ In other parts of the world, other species are responsible for this reaction. There have been many reports from Asia where the ant fauna is large, especially from Korea that considers *Pachycondyla chinensis* as a major cause of ant sting allergy.¹ In United Arab Emirates (UAE), the samsum

ant *Pachycondyla sennaarensis* sting is considered a health hazard.³ We report a 32-year-old Saudi female from Hafr-Al-Batin, in the Northern region of Saudi Arabia, with history of recurrent anaphylaxis following black (samsum) ants sting and review the related literature.

Case Report. A 32-year-old Saudi housewife from Hafr-Al-Batin, presented to a private clinic in Riyadh with history of repeated anaphylaxis after being stung by black ants. She had 4 episodes of anaphylaxis of increasing severity. The last attack was so severe that she became unconscious and was taken to the Emergency Department of Hafr-Al-Batin hospital where she was resuscitated. She received intravenous fluid and methylprednisolone in addition to subcutaneous epinephrine. Samples of black ants were brought from the patient's residence and submitted to an expert entomologist (Al-Khalifa) for identification. These were identified as *Pachycondyla sennaarensis* (Figure 1). She stated that these ants are heavily colonizing the Hafr-Al-Batin

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