# Angioneurotic oedema following red ant bite

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## DESCRIPTION

A toddler, who was in good health, had a sudden onset of crying while playing. His parents noticed three to four red ants on his right foot. They took him home after getting rid of all the ants. After 30 min, it was clear that he was having trouble breathing and that his lips and eyelids were swollen (figure 1A). He had weak pulses, with a heart rate of 180 beats/min and a respiratory rate of 40 beats/min with stridor. Anaphylaxis was diagnosed clinically. The oxygen saturation in the room air was 80%, and the blood pressure was 70/50 mm Hg. He received intravenous fluids, an intramuscular dose of epinephrine, intravenous chlorpheniramine and intravenous hydrocortisone. He was also given oxygen through a mask. Because the first dose of hydrocortisone did not help with his stridor, he got another dose. After an hour of intravenous fluids and oxygen, his blood pressure began to rise, his oxygen saturation returned to normal at room temperature, his respiratory distress settled and he began responding to verbal commands. He developed papules on the dorsum of his right foot 2 hours after being admitted. He made clinical progress and was discharged 24 hours later. The ant belonged to the species Solenopsis geminata (Fabricius) (figure 1B). Though many species of ants exist in India, the present report is due to the red ant (Solenopsis geminata (Fabricius)).<sup>1</sup> Stings are more frequent in children and on legs, and they mostly happen in the summer.<sup>2</sup> The majority (95%) of the red ant venom is made up of alkaloids, with a little amount of the



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**Figure 1** Angioedema of lips (A); red ant—*Solenopsis geminata* (Fabricius) in the inset (B).

# Learning points

- Between 0.6% and 1% of red ant bites can cause anaphylaxis, and the chances of anaphylaxis with subsequent bites will be higher.
- Any person who is allergic to insect stings should have epinephrine (such as an EpiPen), identification, and a written, individualised anaphylaxis emergency action plan in their emergency kit.

aqueous fraction containing soluble proteins. About 90% of the venom alkaloids are composed of the 2,6,di-substituted piperidines, which have haemolytic, antibacterial, insecticidal and cytotoxic properties.<sup>3</sup>

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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

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