

Correspondence

Skin diarrhoea due to scorpion sting

Scorpion sting is a life-threatening acute medical emergency constitutes a major public health problem in several parts of the world, especially in South Asia, including India, Central and South America, North Africa and the Middle East.^[1] Its venom delays the closing of neuronal sodium channels, resulting in 'autonomic storm' owing to sudden pouring of endogenous catecholamine into the circulation. Autonomic storm is characterised by transient parasympathetic and prolonged sympathetic stimulation.^[2-4] Parasympathetic stimulation is characterised by profuse sweating all over the body (skin diarrhoea), rosy salivation, vomiting and priapism. Here, we report the case of scorpion sting presenting with skin diarrhoea.

A 48-year-old female sustained a scorpion sting due to *Mesobuthus tumulus*, (Indian red scorpion) the Indian red scorpion on her left index finger while picking grass during work, few minutes later, she developed sudden onset of severe localised pain followed by generalised weakness and giddiness. Three hours later, she presented to our emergency service with profuse sweating all over the body [Figure 1]. On physical examination, the patient was afebrile, was weighing 40 kg, pulse 55/min and blood pressure 90/50 mmHg. Profuse generalised sweating was evident all over the body. Systemic examinations of respiratory, cardiovascular, abdominal and neurological systems were unremarkable. Based on the clinical picture, a diagnosis of skin diarrhoea due to scorpion sting was made and the patient was treated with intravenous fluids, oral prazosin (500 µg/kg body weight, 20 mg) and analgesic. She improved symptomatically, the present case highlights skin diarrhoea occurring as a parasympathetic manifestation of scorpion sting.

Mesobuthus tumulus, Indian red scorpion, was commonly found in the Western Maharashtra, Saurashtra, Kerala, Andhra Pradesh, Tamil Nadu and Karnataka. Scorpion stings are reported in large numbers in India and 15%–20% of these stings manifest with systemic symptoms.^[2,5] Clinical presentation of scorpion sting envenomation includes local and systemic manifestations.^[4] Local manifestations include pain, urticaria, oedema and spasm of underlying muscles. Salient systemic manifestations include autonomic storm, initial parasympathetic stimulation leads to vomiting, copious salivation, profuse sweating all over the body (skin diarrhoea) and priapism. Sympathetic manifestations



Figure 1: Clinical photograph at the time of admission showing sweating over the forearm (a) and sweating over the abdomen (b)

characterised by anxious puffy face, propped up eyes, oculogyric crisis, chest discomfort and major manifestations such as hypertensive crisis and acute pulmonary oedema. Electrocardiogram shows sinus bradycardia, ventricular premature beats and rarely fatal ventricular arrhythmias, among others.^[5] Patients can be treated symptomatically with local ice packs at the sting site, local anaesthesia lignocaine without adrenaline and non-steroidal anti-inflammatory drugs for pain relief. Prazosin is an α -1 adrenergic blocker reduces preload and left ventricular impedance without causing tachycardia and can be administered orally in a dose of 250–500 µg/kg body weight in children and 500–1000 µg/kg body weight in adults; it is repeated every 3 hourly until the signs of clinical improvement appear.^[5] Use of scorpion anti-venom in combination with prazosin hastens the recovery; use of scorpion anti-venom is not mandatory.^[6] However, anti-venom could not be used in our patient due to non-availability.

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Conflicts of interest

There are no conflicts of interest.

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