

CUTANEOUS EXPOSURE TO COBRA VENOM: AN UNCOMMON PRESENTATION

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Introduction: Snake envenomation is an uncommon presentation in our local emergency departments, usually involving a direct bite of the perpetrator¹. We report a case of a 58-year-old male patient afflicted with cutaneous venom exposure from a spitting snake.

Clinical Presentation: A 58-year-old man presented an hour after being spat at by a snake that had a description consistent with that of a Cobra. He had used his left arm to protect his eyes and subsequently developed a painful skin reaction over his elbow. He was otherwise well with no nausea, weakness, dizziness, headache, or diplopia. On examination he was alert and comfortable. Vital signs only showed a mildly raised blood pressure. Multiple discrete red papules were noted over the medial elbow region, extending to the proximal arm (fig.1*). A full Neurological exam was unremarkable. His Full blood count, serum electrolytes, coagulation profile, and a Left elbow X-ray were normal.

Management: Our patient was diagnosed with local skin reaction to Cobra (Elapidae) venom. He was treated with copious irrigation, IM promethazine, PO amlodipine, and Tetanus toxoid, followed by overnight observation. After 6 hours, the rash coalesced and gradually spread proximally up his arm (fig. 2*). He was drowsy but did not develop neurological deficits suggestive of systemic envenomation. The next morning, he was alert with a marked improvement in his rash (fig.3*). He was discharged well 30 hours after exposure with topical steroid cream, oral antihistamine, and oral antibiotics.

Discussion: A retrospective review of patients presenting with snake envenomation to a general hospital in Singapore from 2004-2008 identified 52 patients, of whom only 1 was spat in the eye by a cobra¹. Cobra venom, such as that of *Naja Sumatrana* (commonest spitting cobra in Singapore²), is predominantly Neurotoxic although Cardiotoxic and Cytotoxic components have been reported³. Systemic neurotoxins cause progressive descending paralysis with ptosis, swallowing/speech difficulty, and possibly death from acute respiratory failure. Treatment entails supportive care for all patients exposed to snake venom and use of early anti-venins. Local effect of venom on the eye (Snake Venom Ophthalmia) has been described, and is attributed to lytic properties of Cardiotoxic venom components on corneal and conjunctival epithelium⁴. WHO guidelines recommend copious irrigation, topical analgesia and prophylactic topical antibiotics in managing these patients⁵. Our patient had an isolated local skin reaction to spitting cobra venom. He responded well to supportive treatment.

(* Figures to be presented in poster)