

## 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 perpetrator<sup>1</sup>. 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 cobra<sup>1</sup>. Cobra venom, such as that of *Naja Sumatrana* (commonest spitting cobra in Singapore<sup>2</sup>), is predominantly Neurotoxic although Cardiotoxic and Cytotoxic components have been reported<sup>3</sup>. 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 epithelium<sup>4</sup>. WHO guidelines recommend copious irrigation, topical analgesia and prophylactic topical antibiotics in managing these patients<sup>5</sup>. Our patient had an isolated local skin reaction to spitting cobra venom. He responded well to supportive treatment.

(\* Figures to be presented in poster)