



### Suspected case of acute hypopituitarism following envenoming by Russell's Viper (*Daboia russelii*) in Sri Lanka: A case report

Chaminda Suwaraweera, Indika Gawarammana<sup>2</sup>

<sup>1</sup>Department of Medicine, Faculty of Medicine, University of Peradeniya

<sup>2</sup>Teaching Hospital, Peradeniya, Sri Lanka.

**Objective:** Endocrine complications due to Sri Lankan Russell's viper bite (*Daboia russelii*) are rare. However, a few cases of acute and chronic hypopituitarism have been described. Microvascular thrombin deposition and focal hemorrhages in the pituitary are thought to be the pathophysiology for the development of hypopituitarism in these patients.

**Case Report:** A 72-year-old male farmer with known hypertension was transferred from a local hospital with a 3 hour history of a Russell's viper bite on the left foot. The patient identified the snake as Russell's viper. On admission he was conscious and had 2 episodes of hematemesis, bilateral ptosis, blurred vision and bleeding from the bite site. He was directly admitted to the toxicology intensive care unit. His blood pressure was 90/60 mmHg with pulse rate 88 beats per minute. His whole blood clotting time (20WBCT) was more than 20 minutes. He was given 10 vials of Indian polyvalent anti-venom (vins), one pint of blood and 4 units of FFP (Fresh Frozen Plasma). Subsequently intravenous noradrenaline infusion was started through a neck vein as blood pressure further reduced to 60/36 mmHg. His ECG had no changes. His serum creatinine and blood urea were elevated with reduced urine output noted in the first day. His blood glucose level fluctuated throughout the course ranging from 66 mg/dl to 250 mg/dl (he was on 5% dextrose with inotropes). He had mild hypokalemia in initial 11 days. His blood pressure was reduced markedly once the inotropes withheld and became very high with inotropes on and off. On the sixth day acute hypopituitarism was suspected and non-contrast CT brain was performed and it was found to be normal. Short Synacthen test was done on day twelve. He was started on oral hydrocortisone 10 mg 6 am, 5 mg noon and 5 mg at 6 pm. His short Synacthen test was negative. After 13 days his inotropes were tailed off and he was clinically improved with gradual improvement of blood pressure.

**Conclusion:** Even though the acute adrenal insufficiency is the main cause for hypotension, other pituitary hormones may have an effect on blood pressure. Any patient presented with hypotension and hypoglycemia following Russell's viper bite should be strongly suspected for this fatal and rare complication.