ORAL PRESENTATIONS

[ID-O#135] Russell's Viper Bite: Epidemiology, Clinical Characteristics and Outcomes

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Background: Russell's viper (*Daboia siamensis*, RV), a serious hematotoxic snake endemic to various Southeast Asian countries including Thailand, poses substantial health risks, notably mortality and persistent kidney injury post-bite. This study aims to elucidate the clinical features and outcomes of patients affected by RV bites.

Methods: This retrospective cohort analysis investigated patients with RV bites referred to the Ramathibodi Poison Center between 2022 and 2023.

Results: A total of 37 patients were included, predominantly male (86.5%) with a mean age of 43.4 years (SD 19.1). Most cases originated from the central region (64.9%). The median time from snakebite to hospital presentation was 45 minutes (range 10-2160). Onset of clinical effects occurred on average within 23.3 minutes (SD 11.5) post-bite. The lower extremities were the most frequently affected site (81.1%), with almost all patients experiencing local effects, typically mild swelling (97.3%). Upon presentation, a majority exhibited hypertension (91.9%) and tachycardia (56.8%), with three patients presenting with a Glasgow Coma Scale <15. One patient suffered sudden cardiac arrest following a RV bite. Systemic bleeding was observed in 73% of patients, with gross hematuria being the most prevalent manifestation. During hospitalization, 73% developed coagulopathy, 67.6% exhibited abnormal whole blood clotting tests, and 35.1% experienced thrombocytopenia. Acute kidney injury was diagnosed in 37.8% of cases, while hyponatremia and hypokalemia were noted in 6 and 16 patients, respectively. Three patients required intubation, and 10 received blood transfusions. Five patients underwent hemodialysis. Antivenom treatment was administered to 33 patients (89.2%), predominantly using monovalent RV antivenom. The median lengthof hospital stay was 6 days (range 3-31), with no fatalities reported.

Conclusions: This study underscores both hematotoxic effects together with incidence of acute kidney injury, affecting 37.8% of patients following RV bites. Despite the high morbidity observed, there were no fatalities recorded in this cohort.