[ID-P#156] Case Report: Severe Coagulopathy and Hematemesis Following a Mangrove Pit Viper Bite

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Case Description: A 35-year-old man presented to the Emergency Department (ED) following a bite from a mangrove pit viper on his right index finger. He reported immediate pain and near-syncope. Within 2 hours, he developed nausea, vomiting, significant hematemesis, and swelling in his left hand.

Initial examination revealed marked swelling and tenderness around the bite area. Laboratory tests indicated severe coagulopathy with a prothrombin time(PT) >180s(normal<14s), an activated partial thromboplastin time(aPTT) >180s(normal<35s), and an unrecordable INR. The D-dimer level was elevated (>20). The snake specimen, brought to the ED by the patient, was identified by a toxicologist as Trimeresurus purpureomaculatus. Three vials of hematopolyvalent antivenom were administered, leading to a gradual reduction in hematemesis. A repeat coagulation profile 4-hours later showed improvement, but values remained prolonged. Due to ongoing intermittent hematemesis, an additional 3 vials of antivenom were administered. Subsequent observations showed no further hematemesis, and coagulation profiles improved within 12-hours post- antivenom administration.

The patient was monitored in the observation ward and referred to the Orthopaedic team for wound management on day-3 post-bite. He was discharged on day 5 after successful wound care.

Discussion: This case underscores the severe systemic effects associated with mangrove pit viper (Trimeresurus purpureomaculatus) bite, including profound coagulopathy and gastrointestinal bleeding. Although the mangrove pit viper's venom typically causes local symptoms, the rapid onset of coagulopathy and significant hematemesis observed here is atypical and highlights the venom's potential for severe systemic impact.

The prompt identification of the snake species by a toxicologist allowed for the accurate administration of hematopolyvalent antivenom, which was crucial for reversing the severe coagulopathy. The need for additional antivenom due to persistent symptoms illustrates the complexity of managing severe envenomations.

Conclusion: Immediate and effective medical intervention is essential for managing severe snakebite cases. Timely administration of antivenom and continuous monitoring are critical for improving outcomes.