

# Medicine

# A CASE OF RECURRENT AND PROLONGED COAGULOPATHY IN CASE OF VASCULOTOXIC/HAEMOTOXIC SNAKE BITE

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# **KEYWORDS:**

## INTRODUCTION

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The venomous snakes of the world belong to the families Viperidae, Elapidae, Lamprophiidae and Colubridae. Most snakebites occur in developing countries with temperate and tropical climates in which populations subsist on agriculture and fishing. Approximately 20-25% of pit viper bites and higher percentages of other snakebites (up to 75% for sea snakes) are "dry" bites, in which no venom is released. Because the toxic constituents found in venom vary from species to species, snakebite victims can present with a variety of life threatening pathologies related to the neurotoxic, cytotoxic and haemotoxic effects of venom. Of the 1.8 million people envenomed by snakes every year, up to 125 000 die, while hundreds of thousands survive only to suffer with life changing long term morbidity. Consequently, snakebite is one of the world's most severe neglected tropical diseases. Clinical patterns of envenoming can be broadly classified into three groups: neurotoxic, cytotoxic and haemotoxic, although myotoxicity can also present in certain cases. Neurotoxic envenoming is characterised by descending neuromuscular paralysis, beginning with the eyes (ptosis), facial muscles and other muscles innervated by the cranial nerves, before progressing to respiratory and generalised flaccid paralysis. Snakebite victims suffering from cytotoxic envenoming are characterised by painful and progressive swelling at the bite site, developing into blistering and bruising, that are sometimes coupled with systemic effects, which include hypovolaemic shock. Many snake venoms exhibit strong haemotoxic properties by interfering with blood pressure, clotting factors and platelets, and by directly causing haemorrhage. Hemorrhagic tendencies remain high upto 24-48 hours after the envenomation and may persist upto 96hour.

# Case report

A 23 year old female patient residing at kuntasi with history of snake bite at left toe before 8hour referred to civil hospital morbi with chief complain of pain and swelling of left leg upto knee. Patient having no any past history of comorbidities. On examination patient was vitally stable. Her left leg was swollen upto knee with active bleeding from bite marks and bluish discolouration of toe seen. No e/o ptosis, diplopia, dyspnea, dysphonia, dysphagia. In routine investigation, Hb was 10.2, WBC was 7800, Platelet count was 2.67lacs, creatinine was 0.78, Bleeding time 1min 10sec, clotting time was >15min. Prothrombin time was 78sec (control-13sec) and aPTT was 32sec (control-30sec).

## Treatment

Patient was treated with IV antibiotics, anti snake venom. Inj ASV 10vial IV stat given followed by 6vial IV 6hourly. Patient was investigated for clotting time every 6 hourly after each inj ASV. Initially patient's clotting time was responding to Inj ASV, but was returned to > 10min after about 6-8hours. Inj ASV 6vial was given every 6hourly for upto 3days. On 4th day, patient's clotting time came to normal limit and patient was discharged after 5th day of admission. On discharge, her Bleeding time

was 1min 15sec, clotting time was 3min 45sec, prothrombin time was 14sec, aPTT was 28sec.

### CONCLUSION

In patients of haemotoxic snake bite, clotting time remains abnormal(high) mostly upto 24 to 48hours. In this case, patient's clotting time was observed on higher side intermittently for 3-4days. Clotting time came to normal on 4th day. So during the indoor stay of patient one or two normal clotting time does not indicate that patient's coagulopathy has improved. From this case, we conclude that, In a case of haemotoxic snake bite we have to monitor bleeding time/clotting time for minimum 5days.

### REFERENCES

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