# Case Report

DOI: http://dx.doi.org/10.18203/2320-6012.ijrms20193947

# A rare presentation of snake bite

# Sourabh Goswami\*, Prakash Keswani, Shrikant Sharma

Department of Medicine, Sawai Man Singh Medical College and Hospital, Jaipur, Rajasthan, India

Received: 20 June 2019 Revised: 23 July 2019 Accepted: 14 August 2019

### \*Correspondence: Dr. Sourabh Goswami,

E-mail: sourabh14goswami14@gmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### **ABSTRACT**

In India, doctor's in casualty frequently get confronted with snake bite. A wide range of complications occur in snake bite. Intracerebral haemorrhage (ICH) is an unusual presentation following snake bite. Here authors discuss a patient presents with ICH after snake bite. Venom induced consumption coagulopathy is the most accepted theory behind intracerebral haemorrhage.

Keywords: Intracerebral haemorrhage, Snakebite, Venom induced consumption coagulopathy

#### INTRODUCTION

Snake bite is commonly encountered in emergency. It results in various complications varying according to the type of venom injected. In India, more than 2,500,000 snake bites are reported annually, out of which 30,000 to 50,000 cases end in mortality. Intra cerebral haemorrhage is a rare complication following snake bite. 3.4

## **CASE REPORT**

A 75-year-old male presented with sudden onset right sided hemiparesis followed by altered sensorium in SMS hospital casualty. He had a snake bite in his left little finger 4 days back with self-limited swelling for 2 days and also had one episode of dark colored urine 2 days before admission.

After admission, he was found to be unconscious, not responding to verbal or painful stimuli. His vitals were stable. His random blood sugar, electrolytes, hemogram, saturation were within normal limit. His coagulation profile was normal except FDP and d-dimer were slightly raised. Non-contrast computed tomography showed large

left intracranial haemorrhage with intraventricular extension. Neurosurgery department advised for conservative management.

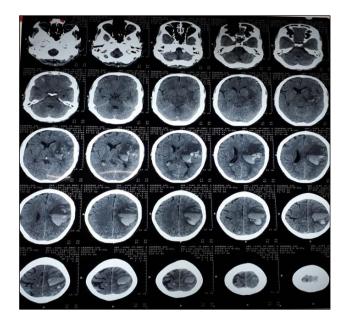


Figure 1: Picture of the NCCT head of the patient.

The patient was started with anti-snake venom after sensitivity testing, FFP, mannitol, 0.9% NS and given general supportive care such as Ryle's tube and Foley's catheter. After 6 days of treatment, the patient's sensorium improved. Although he had right hemiparesis, but he became conscious and oriented. His coagulation parameters returned to normal levels.

#### **DISCUSSION**

A few literatures discusses about the stroke following snake-bite. Girish Menon et all, reported a case of 28year old gentleman who had intracranial haemorrhage following a viper bite and was successfully managed.1 Ophitoxaemia describes the various manifestation of snake bite envenomation. Cerebral complications are rare in snake bite. The most widely accepted pathophysiology behind intracranial complication is venom induced consumption coagulopathy. Snake venom contains different concentrations of enzymes that include proteases, phospholipase A2, hyaluronidase and arginine ester hydrolase. The hyaluronidase causes spread of the venom in the subcutaneous tissue by disrupting mucopolysaccharides and phospholipase A2 is the factor responsible for the haematological complications. They cause haemolysis secondary to the esterolytic effect on the red cell membranes and promote muscle necrosis. Thrombogenic enzymes act in conjunction with these enzymes to promote the formation of weak fibrin clots which in turn activate plasmin and result in consumption coagulopathy and haemorrhagic consequences.<sup>5</sup>

### **CONCLUSION**

Cerebral complications although rare after snake bite, has a high incidence of morbidity and mortality. Early detection and prompt treatment may result in favourable outcome.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not Required

#### REFERENCES

- 1. Menon G, Kongwad LI, Nair RP, Gowda AN. Spontaneous Intracerebral Bleed Post Snake Envenomation. J Clin Diagn Res. 2017 Apr; 11(4): PD03-4.
- 2. Warrell DA. Guidelines for the clinical management of snake-bites in the south-east Asia region. World Health Organization, Regional Office for South East Asia, New Delhi:2005:1-67.
- 3. Boyer LV, Seifert SA, Clark RF, McNally JT, Williams SR, Nordt SP, et al. Recurrent and persistent coagulopathy following pit viper envenomation. Arch Intern Med. 1999;159(7):706-10.
- 4. Murthy JM, Kishore LT, Naidu KS. Cerebral infarction after envenomation by viper. J Comput Assist Tomogr. 1997;21(1):35-7.
- 5. Gold BS, Dart RC, Barish RA. Bites of venomous snakes. N Engl J Med. 2002;347(5):347-56.

**Cite this article as:** Goswami S, Keswani P, Sharma S. A rare presentation of snake bite. Int J Res Med Sci 2019:7:3559-60.