



## CASE REPORT: SNAKE BITE INDUCED NEURO PARALYSIS

Pasula Dinesh<sup>\*1</sup>, Kanneboina Pravalika<sup>2</sup>, Guguloth Chiranjeevi<sup>3</sup> and Adla Nagesh<sup>4</sup>

<sup>1,2,3</sup>Pharm.D Intern, Department of Pharmacy Practice, Balaji Institute of Pharmaceutical Sciences, Lakenapally[V], Narsampet[M], Warangal Rural[D]-506331, Telangana State, India.

<sup>4</sup>Assistant Professor, Department of Pharmacy Practice, Balaji Institute of Pharmaceutical Sciences, Lakenapally[V], Narsampet[M], Warangal Rural[D]-506331, Telangana State, India.

**\*Corresponding Author: Pasula Dinesh**

Pharm.D Intern, Department of Pharmacy Practice, Balaji Institute of Pharmaceutical Sciences, Lakenapally[V], Narsampet[M], Warangal Rural[D]- 506331, Telangana State, India.

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### ABSTRACT

Snake bites are life threatening emergencies and are seen more commonly in rural population. Snake bites having neurotoxic, hemotoxic, myotoxic or mixed presentation. We present a case of 24years Male patient came to emergency department with the complaints of pain in Abdomen, Body pains, B/L Ptosis, dizziness. The patient was given standard management of snake bite (anti-snake venom) based on WHO Guidelines of snake bite. Patient recovered without any neurological deficit within 5 days. Neurotoxic snake bites can occur in sleep by kraits and can present as catastrophic life-threatening emergency in early morning hours in our case.

**KEYWORDS:** Snake bite, krait, Neurotoxic.

### INTRODUCTION

Snake bite presents as a life-threatening emergency in rural areas of countries like India with an incidence of 4.3 per 100,000 populations and mortality of 20%. The 4 major medically important species of venomous snakes are Naja Naja (cobra), Bungarus caeruleus (Krait), Daboia russelii (Russell's viper), Echis carinatum (saw-scaled viper). Snakes were formerly classified as neurotoxic (cobra, kraits), hemotoxic (viper) and myotoxic (sea snakes); however, it is a well-established fact that every species can produce myriads of manifestations.

In an Indian study, Saravu K et al showed that hemotoxic and neurotoxic envenomation were observed in 73.68% and 19.73% of cases respectively while hemo-neurotoxic manifestations were seen in 5.26% of cases. Rarely, neurotoxic snake bite can also present with anaphylaxis. Snake bites can happen at home by cobra which dwells on roof tops/under the floors and by Kraits which nocturnally enter homes in search of prey like mice or lizard. Neurotoxic snake bites especially krait can present with painless bite without local inflammatory signs.

### CASE REPORT

A 24 years old male patient was bitten by a snake (Krait) on the left thumb at 3:00 am and went to the Government

hospital he was treated with ASV (10 vials) later on patient came to the private hospital (EMD) with complaints of abdomen pain, B/L ptosis, body pains, dizziness, and Dysphagia. Patient vitals were conscious and coherent, BP 110/70 mmHg, pulse rate 90 bpm, spo2 87% on RA, RR 14bpm, Temperature normal. No history of HTN/T2DM/CVA/CAD/TSH/BA etc, then shifted to RICU was on a mechanical ventilator(SOS). He was advised to Laboratory investigations like Profile, sr. electrolytes, ECG was done. The reports were Normal in range.

### COURSE OF THE TREATMENT

Patient treated medical management/ patient is on mechanical ventilator support with the below following medication and other supportive therapy.

## MEDICATIONS

S.no	DRUGS	DOSE	ROA	FREQ	DAYS				
					D1	D2	D3	D4	D5
1.	RTF	300ml	P/O	QID	✓	✓	✓	×	×
2.	INJ.ASV	1 UNITS(5%)	IV	SOS	✓	✓	✓	✓	×
3.	INJ.RANTAC	1amp	IV	TID	✓	✓	✓	✓	✓
4.	INJ.OPTINEURON	1amp	IV	BD	✓	✓	✓	✓	✓
5.	INJ.NEOSTIGMINE	0.5mg	IV	BD	✓	✓	✓	✓	×
6.	INJ.ATROPINE	0.6mg	IV	TID	✓	✓	✓	✓	×
7.	TAB.HIFENAC-P	100mg	P/O	BD	×	×	×	✓	✓

The above medications were given for 4Days.

Day 1: The administered Drugs were Inj ASV, Inj.Rantac, Inj. Neostigmine, Inj Atropine, IV Fluids(Optineuron) .Based on the patient condition

Day 2: C/O some ptosis improved partially, No-dysphagia, Body pains. Vitals Normal. followed by continuous same treatment.

Day 3: C/O No complaints, No neuro paralysis symptoms. Vitals normal.followed by continuous same treatment.

Day 4: Remove the RTF Added HIFENAC-P Tablet.

Day 5: Discharge medications like T.HIFENAC-P, SYP.BAYERS, PANTOCID-DSR. If any emergency come to the Hospital.

## DISCUSSION

Although snake bite is a frequently encountered Problem in rural India, it is seen infrequently in Urban areas. Common neurotoxic snakes in India include Cobra (*Naja Naja*)and Krait (*Bungarus caeruleus*). Pain abdomen, the cardinal symptom of krait bite, can precede neurological symptoms by several hours.<sup>[1]</sup> Krait bites are commonly reported between 2-3 am, and those sleeping on the floor are a greater risk.<sup>[1]</sup>

Common neurological symptoms in decreasing Order of frequency include ptosis (85.7%), ophthal-moplegia (75%), limb weakness (26.8%), respiratory failure (17.9%), palatal weakness (10.7%) And neck muscle weakness (7.1%). These are Experienced usually within 6 hours of the bite. Following administration of antivenom, the signs of Recovery became evident within a few hours to Several days and the duration for complete recovery Ranges from four hours to 4 days.<sup>[4]</sup> Our patient Developed most of the the neurological symptoms Described above but showed complete recovery after 48 hrs of administration of high-dose ASV. ASV is most effective when administered within A few hours of Krait bite, hence, a high degree of Suspicion is required as the bite frequently not Witnessed and initial symptoms can be non Neurological (isolated abdominal pain). Our patient Responded to high-dose ASV regimen but there is Evidence to show that low-dose regimen can be as Effective.<sup>[5]</sup>

Ventilator support forms a corner-Stone of krait envenomation therapy. There are Reports that describe

complete recovery from snake Bite, over a period of time, with mechanical Ventilation, in the absence of ASV therapy.<sup>[6]</sup> Current evidence does not indicate a strong role of Anti-cholinesterase drugs (Neostigmine) in patients With common krait envenomation.<sup>[7]</sup>

## CONCLUSION

We report this case because snake bites in are rare and high degree of suspicion Is required to prevent mortality and morbidity. We Emphasize that cases presenting with ptosis and rapidly Progressive descending type neuromuscular paralysis in The background of other features (pain abdomen, dizziness), neurotoxic snake bite should be Kept as one of the possibility. Snake bite such as krait bite (most probably in this case) can be painless.

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