

# PREDICTOR AND LONG-TERM OUTCOME OF SNAKE BITE ASSOCIATED AKI (SAKI) IN EASTERN INDIA

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## 1 Introduction

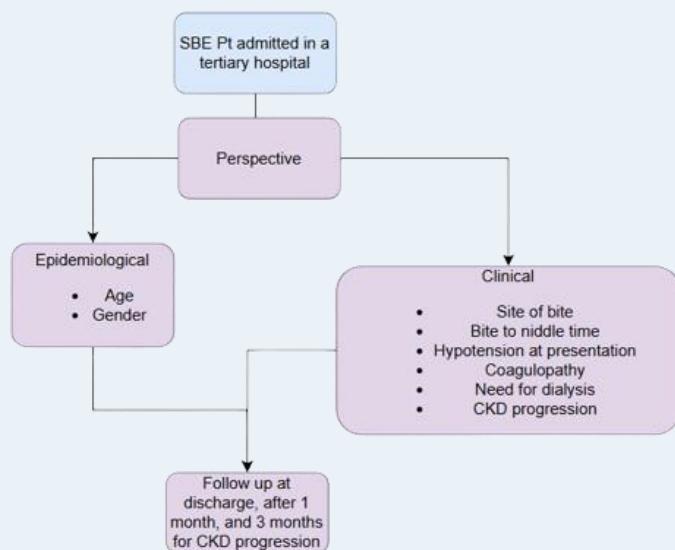
Vasculotoxic snakebite is an occupational hazard in India. Despite improvement in management of SB, there is high mortality rate. Along with that, marked progression of snakebite associated AKI (SAKI) to CKD is high.

## 2 Aim

The purpose of this study is to explore the clinical profiles and outcomes of snakebite envenomation in a tertiary care Hospital.

## 3 Method

It is a prospective, longitudinal study. The patients were admitted in General Medicine Department of NRS Medical College and Hospital, Kolkata with snakebite from September 2023 to August 2024. The data is assessed from an epidemiological perspective like age and gender and clinical perspective. Patients are followed up at discharge, at 30days, and 3 months for CKD progression.



Univariate analysis followed by multivariate analysis is done to look for clinical predictors of mortality, AKI and CKD progression.

## 4 Results

Total 135 patients were enrolled in this study. Among them 75 were male (55.55%) and rest of them are female. The mean age is 38.29 (95% CI of presentation 36.23-40.5). Mean bite to needle time is 1.84hr. Mean of ASV is  $18.62 \pm 1.27$  vials. 78 (57.77%) people were in SAKI group. 113 (83.81%) patients had bites on the lower limb. Deranged PT is found in 30(22.23%). Platelet count less than 1,50,000 is seen in case of 75 (45%) patients. 27 (20%) patients had DIC. Median of bite to AKI developing time is 3 days. 70 (90%) patients needed HD. The median of the HD were 3 sessions. 14 (10.25%) patients from AKI stage-1, 88 (65.40%) patients from stage-2, 21 (15.38%) patients from stage-3, 11 (8.97%) patients from stage-4. 7 (5.12%) death occurred in SAKI group and most of them belonged to stage -3 & 4 AKI. Long-term follow up data is available for 91 patients. 67 (85.89%) patients were from SAKI group. 14 (17.94%) patients had abnormal renal function at 3 months follow up.



## 5 Conclusion

SAKI still possess significant mortality and morbidity risk. Hypotension, coagulation abnormality, AKI stage at presentation and need for dialysis possess significant risk factors of adverse outcome, as well as long-term complication like CKD. Early renal recovery has better renal outcome. Patient having DIC at presentation have poor outcome in respect of mortality and CKD progression.

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