

**ADVERSE DRUG REACTIONS OF ANTI-SNAKE VENOM AMONG  
HAEMOTOXIC AND NEUROTOXIC SNAKE BITE – A PROSPECTIVE  
OBSERVATIONAL STUDY**

**INTRODUCTION:** Adverse Drug reactions (ADR) is defined as “any noxious change which is suspected to be due to a drug, occurs at doses normally used in man, requires treatment or decrease in dose or indicated caution in the future use of the same drug”. Anti-Snake venom (ASV) is the only promising lifesaving treatment for management of snake bite, till date. Snakebite is a terrifying experience at an individual level, as in India the low socio-economic people are mostly affected in all age groups.

**AIM:**

**PRIMARY OBJECTIVE**

- To analyze the prevalence of the Adverse Drug Reactions and dosage patterns of Anti-Snake Venom.
- To compare the safety profile with regard to Anti-Snake Venom among three Manufacturers.

**SECONDARY OBJECTIVE**

- To perform causality and severity assessment of the Adverse Drug Reactions.
- To Study the Demographic and clinical Profile of Snake Bite Cases.

**MATERIALS AND METHOD:** This prospective observational study was conducted in patients admitted with snake bite in three districts of Tamilnadu during January 2016 to December 2016. The Causality assessment was done by using Liverpool

Causality Tool and the severity assessment was done by modified Hartwig Seigel scale.

**RESULTS:** Among 476 patients, 370 (77.73%) were from Perambalur district, 64 (13.44%) from Ariyalur district and 42 (8.82%) from Erode district and 206 (43.2%) were administered ASV. Overall, 2330 vials were used and the mean ASV used was  $11.59 \pm 6.38$  vials ranging between 1 to 30 vials per patient. Adverse reactions were seen in 55 (26.7%) patients. Among the three manufacturers, it was 17 (26.9%) in ASV I, 25 (24.7%) in ASV II and 13 (30.9%) in ASV III. There was a no significant correlation between the types of manufacturers and incidence of adverse reactions. There were 4 deaths (2 - respiratory failure and 2 - cardiac failure) recorded in this study.

**CONCLUSION:** This study highlights that the 3 different manufacturers of ASV do not reflect the incidence of adverse reactions. ASV has relative variability in their batches and snake species and their geographical variations.

**KEYWORDS:** Adverse Drug Reactions, Anti-Snake Venom, Haemotoxicity, Neurotoxicity, Liverpool Algorithm.