[ID-P#141] Snake Envenomation in Eastern Visayas Philippines

Yoshihiro Aoki[a], Patrick Joseph Tiglao[b] and Jonathan Paghubasan[a]
[a]Nagasaki University; [b]University of the Philippines - Philippine General Hospital; [c]Eastern Visayas Medical Center)

Introduction: Snakebite incidences in the Eastern Visayas Region Philippines remain prevalent and understudied. Furthermore, scarcity of data on the use and shortage of Philippine Purified Cobra Antivenin (PCAV) specifically in *Naja samarensis* envenomaton pose challenges in the region.

Objective: These observational studies aim to provide the baseline data and to optimize the treatment of snakebite cases in the region.

Methods: Descriptive observational studies were done through retrospective chart review and demographic data analysis of snakebite cases (n=82) from 2016-2020 and another prospective study of snakebite cases (n=175) from May 2022-June 2023.

Results: Of the 82 neurotoxic cases identified (2016-2020), mostly are males (61%),under 20 years of age (33%), and living in the rural area (farmers) (92%). Patients who received more than two PCAV ampules had a longer hospital stay than those who received less (72%). There were also five in-hospital mortalities (6.1%). On the other hand, prospective data of 175 snakebite cases (May 2022-June2023) mostly were students from residential areas. Tourniquets and traditional therapies were used in pre-hospital setting. Eleven patients developed respiratory failure, with five fatalities. Of 49 probable

N. samarensis cases, 13 were dry bites; one involved eye pain from spat venom, and 23 presented with neurologic envenomation. Twelve presented with only cytotoxic signs. Underlying disease was significantly associated with severity (adjusted odds ratio: 5.93, 95% CI: 1.46-24.07, p=0.013).

Conclusion: These studies collectively contribute to a better understanding of neurotoxic snakebites in the Philippines. *N. samarensis* bites are prevalent, especially among younger people in rural residential areas where traditional remedies were used. The use of antivenom is crucial; however, delayed administration may be associated with a poor outcome. By examining patient characteristics, treatment practices, and outcomes, we aim to inform and refine clinical protocols, ultimately improving patient care and intervention strategies for snakebite envenomation in the region.