ORAL PRESENTATIONS

[ID-O#092] Timely Intervention in Snakebite Cases: The Impact of Bite-to-Door Time on Clinical Outcomes

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Background: Snakebites are a critical medical emergency requiring prompt intervention. Delays in seeking medical care lead to adverse outcomes. The term "bite-to-door (BTD) time"refers to the interval from when a person is bitten by a snake to when they reach a medical facility.

Objective: To investigate the association between BTD time and clinical outcomes in snakebite victims at a tertiary care centre in Kerala.

Methods: This prospective observational study included consecutive snakebite cases presenting to the Emergency Department over 18 months. Data were collected using a predefined questionnaire, and patients were followed up for 30 days post-discharge.

Results: Among the 860 patients studied, the median BTD is 60 (Q3(120)-Q1(40)) minutes. Among 164 species which were identified, Sand Boa (23%) was the most common followed by wolf(15.9%), and venomous species included Russell viper (12.8%), Hump Nosed Pit Viper (11%), Krait and Cobra (4.2%). No significant association was found between BTD and local complications, hematotoxicity, respiratory paralysis, cardio toxicity, and mortality. However, a shorter BTD was associated with reduced incidence of acute kidney injury (AKI) (p=0.014) and shorter ICU stays (p=0.006). Females had shorter BTD (p=0.023). Among 113 venomous bites, 4 patients (3.5%) died. Bringing the snake species for identification and using private vehicle transportation were associated with shorter BTD (p=0.001 and p=0.04), respectively.

Conclusion: The study highlights the critical impact of BTD time on clinical outcomes in snakebite cases. Factors like gender, snake species identification, and transportation mode significantly influenced BTD. Prompt medical intervention within the first hour significantly improves prognosis. These findings emphasize the need for public health initiatives to reduce BTD, such as community education, improving transport, and pre-hospital care.