Oral Abstracts

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EPIDEMIOLOGY AND OUTCOME OF SNAKEBITES IN THE PERIPHERAL HOSPITALS IN NORTH WESTERN PROVINCE OF SRI LANKA

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Objectives: Sri Lanka has rich fauna of snakes and records substantial numbers of snakebite annually. The island has three climatic zones (dry, intermediate and wet) where North Western Province (NWP) bounds both dry and intermediate zones. Breaking the tradition of studying snakebite epidemiology in tertiary care hospitals, for the first time, this study aimed to study epidemiology and outcome of snakebite in all peripheral hospitals in the Kurunegala district in NWP.

Methodology: The district has 44 peripheral hospitals and a tertiary care hospital-Teaching Hospital, Kurunegala (THK). As part of a prospective study we recorded all snakebite admissions to peripheral hospitals and their outcome, particularly the transfers to THK occurring in one year. The hospital records were scanned and reviewed independently by an expert in the field.

Results: There were 2186 admissions of snakebites with population incidence of 133/100,000. Median age was 40 years (IQR 27-53), and 59% were males. Median time to hospital arrival was 45 minutes (IQR 30-90) and 49% of bites occurred between 6pm and 12am.The offending snake was identified in 978(44.73%) cases: 64 non-venomous snakes and 914 venomous snakes. The venomous snakebites included 823 hump-nosed viper (Hypnalespp), 61 Russell's viper, 14 cobra, 13 common krait, 03 saw scaled viper. Antivenom serum (AVS) was given to70 (3.2%) patients and 22(31.43%) of them developed adverse drug reactions. There were no deaths. Of the total, 399(18.25%) patients were transferred out from peripheral hospitals. The expert opinion suggested 341(85.46%) as unnecessary transfers. Of the transfers, THK received 294 cases. Case records of 177 were available for analysis and of them, only 30 cases (17%) received AVS proving the fact of unnecessary transfers. 54 patients had ASV hypersensitivity (33.54%). Itching- 52 (94.54%); urticaria-41(74.55%); bronchospasm 20 (36.36%) and anaphylaxis 16 (29.09%).

Conclusions: Peripheral hospitals received a significant number of snakebites that would be missed in surveys conducted in tertiary hospitals.The majority of the snakebites were treated appropriately in the primary hospital with only a few needing AVS therapy. Most of the transfers were unnecessary causing wastage of resources and money. Further education and confidence building in management of snakebite is recommended.