

Poster Abstracts

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ADVERSE REACTIONS TO F(ab')₂ ANTIVENOM OF SNAKEBITE PATIENTS

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Objectives: To evaluate the incidence of adverse effects of snake antivenom and patient outcomes after snake bite.

Methods: Retrospective analysis of patients who were consulted to Ramathibodi Poison Center from January 1 to December 31, 2016.

Results: A total of 472 snakebite patients were consulted to Ramathibodi Poison Center during the study period, however, 297 patients (62.9%) were identified as bitten by venomous snakes. Among these venomous snake bitten patients, 228 patients (76.8%) met the criteria to be treated with F(ab')₂ antivenoms. They are 7 specific monovalent and 2 polyvalent antivenoms which are produced by Queen Saovabha Memorial Institute, Thailand. The mode and median age of all patients were 37 year-old (range 11 months – 82 years). Most of initial severity was moderate to severe (78.5%). The medical outcomes were minor effect (7.5%), moderate effect (82.0%), major effect (7.0%), and death (2.6%). Among the patients who were treated with antivenom, 46 patients (19%) developed early adverse reactions (EARs) within 3 hours after antivenom administration. The percentage of patients who had EARs were different among the different antivenom; Malayan krait 33.3%, Malayan pit viper 28.6%, cobra 21.1%, green pit viper 14.3% and Russell's viper 7.1%, and none for king cobra. For the polyvalent antivenoms, for hematoxin 20% and 18.5% for neurotoxin. The grading of EARs can be classified as following: severe 23.9% including one fatality, moderate 39.1% and mild 37.0%.

Conclusion: Antivenom is an essential therapy for snakebite patients. However, the F(ab')₂ antivenoms may also induce EARs. The incidences of EARs varied among various study. This study found 19% of EARs. Each antivenom caused EARs at the different rate, ranged from 7-33%. Size of this study was small, further study should be done to provide a clear picture