Clinical profile and outcomes of snakebite envenomation in Fayoum governorate, Egypt.

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Abstract

Objectives: Snakebite is an extreme medical emergency requiring convenient intercession. Snakebite victims and medical care providers assumed a vital role in determining snake type. Two toxic species are widespread in Egypt; the family Viperidae (snakes) and the family Elapidae (Egyptian copra: Naja Haje).

The work aims to map out the sociodemographic characteristics, patterns, the profile of clinical manifestations, possible predictors of severity, and the outcomes for snakebite patients admitted to Fayoum general hospital.

Methods: This study was carried out at Fayoum general hospital from May 2018 to May 2020. In each case, sociodemographic data, poisoning data (delay time, site of bite and type of snake), clinical data (local and systemic manifestations and post-snakebite complications), laboratory data (CBC, PT, INR), grading of the envenomation severity (Grade 0 – no envenomation, Grade 1 – mild envenomation, Grade 2 – moderate envenomation, Grade 3 – severe envenomation), anti-snake venom vials (ASV), and outcomes of the patients (survived, non- survived and referred) had recorded. Data were collected and coded for statistical analysis.

Results: Males outnumbered females (85.7% versus 14.3%), and the mean age of patients was 32.31 years. 85.7% were living in rural places, presented commonly during the summer season (68.6%), the mean delay time was 5.89 hours, the mean duration of hospitalization was 5.13 days, and the mean ASV was 16.71 ± 7.760 for each patient till discharge. 60% was Viper's snake. The lower limb was the most familiar sight of the bite (57.2%). There was a highly significant difference between the outcomes of patients and the delayed time of presentation to the hospital, prothrombin time, and INR. The mortality rate was 8.6%. Early administration of the ASV has reduced morbidity and mortality.

Conclusion: Gender, residence, the season of bite, the type of snakebite, pain, local oedema, extending oedema, blisters, ecchymosis, respiratory arrest, coagulopathy, CBC findings, and INR; were all excellent predictors of severity.

Keywords: Anti-snake venom; Fayoum; Outcomes; Snakebite; Viperidae.