

ASSESSING THE INVOLVEMENT OF A MEDICAL TOXICOLOGIST IN THE CARE OF RATTLESNAKE ENVENOMATED PATIENTS

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BACKGROUND:

Rattlesnake envenomations are common. The impact of a medical toxicologist in the care of a patient with a rattlesnake envenomation is unknown. The primary purpose of this study was to evaluate the impact of a toxicology service in the care of these patients

METHODS: This study compares the care of patients presenting with rattlesnake envenomation before and after a toxicology service was created at six different medical centers. Data were collected for the two years before and two years after the toxicology service was created. Each center started the toxicology service at different times (ranging from 2008 through 2013).

RESULTS: A total of 390 subjects were identified (210 pre toxicologist, 180 post toxicologist). The median (IQR) age was 46 (24-47) years; 75.6% were male and 60.7% had upper extremity bites. There were no differences in demographics, bite characteristics, transfusion of blood products, or surgical intervention between the two groups. The mean number of vials of CroFab in the pre-group was 11.1 (95% CI 10.1-12.1) compared to 13.6 (95% CI 12.43-14.77) in the post-group. However, the mean length of stay decreased significantly from 72.2 (95% CI 65.7-78.6) hours in the pre-group to 47.6 (95% CI 44.1-51.3) hours in the post group. Re-admission occurred in 24 (11.4%) of the pre-group, compared with 26 (14.4%) of the post group (p=0.44)

CONCLUSION: The establishment of a toxicology service was associated with slightly increased utilization of CroFab but at a significantly reduced length of stay. This decreased length of stay was not associated with an increased rate of readmission.