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90. Snakebite in the Elderly: A Retrospective Cohort of Patients Reported to the ToxIC North American Snakebite Registry Ruha AM¹, Spyres, MB¹, Kleinschmidt KC², Greene S³, Vohra R⁴, Smith E², Padilla-Jones A¹, On behalf of the ToxIC Snakebite Study (TICSS) Group* ¹*Banner Good Samaritan Medical Center, Phoenix, AZ, USA;* ²*University of Texas Southwestern Medical Center, Dallas, TX, USA;* ³*Baylor College of Medicine, Houston, TX, USA;* ⁴*UCSF Fresno Medical Education Program, Fresno, CA USA*

Background: Epidemiologic studies of snakebite in the US report typical victims to be young men. While some pediatric studies exist, there is no literature focusing on a geriatric population.

Research Question: What are the characteristics, clinical course, and outcomes of elderly patients with envenomation by North American snakes?

Methods: Data reported to the ToxIC North American Snakebite Registry (NASBR) between March 1 2013 and October 31 2014 were reviewed. Inclusion criterion was age >65 years. Data included demographics, snake species, clinical and laboratory findings, treatments, and outcomes. Descriptive statistics were used.

Results: Fourteen sites representing ten US states contributed 276 cases. Twenty were >65 years (14, 66–79; 4, 80–89; 1, >89 years). Fourteen were men. Sixteen had co-morbidities; thirteen used cardiac medications and seven antiplatelet or anticoagulant medications. Bites were by 19 rattlesnakes and 1 unknown crotalid. Thirteen were upper and seven lower extremity bites. Time to healthcare was <2 h (n=19). All demonstrated swelling; eight had hemotoxicity (platelets <150 K/mm³ or fibrinogen <150 mg/dL), fivethrombocytopenia (3 < 5 0 K/mm³), and five hypofibrinogenemia (4 below limit of detection). One had minor bleeding, one hypotension, one tachycardia, and one new atrial fibrillation. All received Fab antivenom (mean 9 vials, range 4–18). Hospital stay ranged 1–3 days. Six had ≥1 set of follow-up laboratory studies and absence of bleeding documented. Two were readmitted and retreated: one for swelling; the other twice, for recurrent coagulopathy 7 days post-bite and late thrombocytopenia 15 days post-bite. This patient did not take anticoagulant or antiplatelet medications, and hematology studies were normal 5 days post-bite.

Discussion: In this elderly cohort, co-morbidities and use of antiplatelet or anticoagulant medications, which have been associated with increased risk for early and late bleeding following snakebite, were common. No late bleeding complications were reported in this study, although only 30 % had follow-up for late hemotoxicity and bleeding documented. Ten percent of patients were readmitted and retreated. One study limitation is that followup may have been performed by non-NASBR participants.

Conclusion: Elderly patients with North American snake envenomation are likely to have co-morbidities and take medications that may increase their risk for bleeding and complications.

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