Presented at North American Congress of Clinical Toxicology 2020– Virtual

Published in Clin Toxicol 2021;59(11):1061-1062

99. Epidemiology, Clinical Features, and Management of Texas Coral Snake (Micrurus tener) Envenomations Reported to the North American Snakebite Registry

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Background: There are 5,000–8,000 snakebites reported to poi- son control centers (PCCs) annually in the United States (U.S.), but very few are attributed to coral snakes. Clinical manifesta- tions following a coral snake bite may vary depending on the species involved. This study describes the epidemiology, clinical effects, and management of Texas coral snake envenomations using prospective data reported to the North American Snakebite Registry (NASBR), administered by the American College of Medical Toxicology (ACMT).

Methods: Data collected in the NASBR include details on the snakebite encounter, patient demographics, circumstances of the envenomation, clinical presentation, diagnostic or laboratory tests, treatment, and any outpatient follow-up or re-admissions post-discharge. For this report, all Texas coral snake (Micrurus tener) envenomation cases reported to NASBR were identified for the period from January 1, 2015 through December 31, 2019. Data reviewed for this study included details regarding the snake encounter, patient demographics, local and systemic signs and symptoms, treatment, and outcomes. Descriptive statistics were used to report results.

Results: Fourteen Texas coral snake bites were reported to the NASBR. Ten men and four non-pregnant women reported coral snake bites. Nine (64%) patients were younger than 18 years old, with ages ranging from 5–72 years old (median 15.5 years old). There were 12 patients with upper extremity bites and two with bites to the lower extremity. Circumstances of the snake encoun- ters are described in Table 1. All but one of the bites occurred in the wild. Two patients had a history of prior snakebites and were the only two with a history of illicit substance abuse. Three sub- jects reported alcohol use, but none were intoxicated at the time of the bite. Tobacco use was reported in one subject. The most common symptoms reported were paresthesias and pain. All sub- jects had paresthesias, often described as an “electric” sensation. Seven patients described them as painful, and three rated the pain as “severe”. The most common clinical findings were erythema and swelling. Erythema contiguous to the bite site was noted in eight patients, four of whom also had mild swelling. Swelling was not noted in patients without erythema. No patient developed tissue damage (Table 2). There were no cases of hematotoxicity, rhabdo- myolysis, hypotension, or respiratory symptoms.
No patient had any objective weakness. Thirteen subjects were treated with opioids. Six patients were treated with antiemetics: three prophylactically and two for opioid-induced nausea. One patient developed nausea and non-bloody, nonbilious emesis within one hour of the bite, prior to receiving opioids. No patients were treated with antivenom. Antibiotics were not administered to any patient, and no infections were reported.

Conclusions: Envenomations from M. tener in Southeast Texas are characterized by paresthesias that are often painful. Mild swelling and erythema at the envenomation site are

also com- mon. Neurotoxicity necessitating intervention with antivenom or mechanical ventilation did not occur.