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## **80. Characteristics of Acute Cottonmouth Envenomation from the ToxIC North American Snakebite Registry (NASBR)**

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**Background:** Few data have been published detailing the acute manifestations of envenomation by *Agkistrodon piscivorus* (cottonmouth). We describe characteristics of acute cottonmouth envenomation from prospective data within the ToxIC North American Snakebite Registry (NASBR). To our knowledge, no prospectively collected data exist in the scientific literature.

**Research Question:** What are the clinical characteristics of cottonmouth envenomations entered into the ToxIC NASBR?

**Methods:** Data reported to the NASBR between March 1, 2013 and November 10, 2014 were reviewed. The database was queried using the keyword "cottonmouth." Data collected included demographics, clinical and laboratory findings, treatments, and outcomes.

**Results:** Three sites contributed 11 cases of cottonmouth envenomations. Eight bites occurred in males. Six were in children age 7–12 years, one in a 16-year-old, and four in patients aged 19–65 years. Swelling was the most commonly reported clinical finding and occurred in all. Ecchymosis occurred in nine patients. One patient developed a PT>15 s, fasciculations, numbness, and paresthesias. Another developed hemorrhagic blebs/bullae, and a third patient developed a severe hypersensitivity reaction to the venom requiring steroids, epinephrine, and vasopressors and underwent fasciotomy. Eight bites occurred to the lower extremity, three to the hand or finger. Six patients developed soft tissue swelling extending beyond one major joint, one extending beyond two major joints; three did not cross a major joint, and no data were available for one patient. Ten patients were treated with a mean dose of 12 vials of CroFab. Four patients required hospital stays of 49–72 h; three required stays of 25–48 h, and two were discharged in <24 h. No LOS data were available for two patients.

**Discussion:** Cottonmouth envenomations are uncommon. Our prospective data were limited to 11 patients. Seventy-three percent of envenomed patients were male. Swelling and ecchymosis were the most common clinical symptoms. One patient developed a severe hypersensitivity reaction and also underwent fasciotomy while another developed atypical neurotoxic symptoms.

**Conclusion:** Cottonmouth envenomations can manifest with moderate to severe symptoms and may require inpatient medical management beyond 24 h.

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