

Health

Clinician Story: Life-Saving Treatment of a Rattlesnake Bite

Dr. Shannon Heinrich, Hospitalist, Alabama



THE CLINICAL CASE

Over the summer, I was working at a rural hospital in Alabama as the hospitalist Program Director and as a bedside hospitalist. One day, the emergency room called to alert me that they had just examined a patient who had been bitten by a rattlesnake on his toe. According to the ER team, the patient did not meet anti-venom criteria, but they suggested he be monitored overnight anyway.

A red flag went up; I had never dealt with a rattlesnake bite. I immediately went to UpToDate to read the latest guidelines and review the treatment algorithm (see algorithm 1).

DIAGNOSIS AND TREATMENT

Based on what the ER had described and what I'd read in UpToDate, I suspected the patient might meet the criteria for anti-venom treatment. I called the pharmacy to make sure we had a supply of CroFab, a commonly used anti-venom. It is expensive and requires multiple doses, so pharmacies don't always stock it, or have the quantity needed. The pharmacy was able to start gathering resources from across the region. My proactive phone call saved us time, which turned out to be crucial.

When the patient arrived on the floor, it was clear he should receive treatment. He was presenting with edema, erythema, symptoms of systemic and local toxicity, and necrosis — all signs cited in the UpToDate article as criteria for anti-venom. UpToDate suggested marking the line of his edema and erythema to monitor for progression. The edema that had started in his toe extended almost up to his thigh.

I called the Poison Control Center and they sent me their anti-venom algorithm, which was identical to the one I had already reviewed in UpToDate. As a result, I was fully prepared, and was able to talk to the patient and his family intelligently about the treatment protocol. We obtained the necessary labwork and monitored his vital signs. UpToDate also prompted me to check for compartment syndrome, so I contacted the surgeon, and I then transferred the patient to intensive care.

We started to administer CroFab according to the protocol, and the patient's symptoms began to resolve. I wrote orders for the nursing staff based on the UpToDate article, so the ICU team had easy access to the information as well. I have no doubt that my patient could have lost his leg, or died, had I not had access to UpToDate, which helped me identify him as a candidate for anti-venom.

TRUST IN UPTODATE

Since we are a small, rural facility, there was concern about whether the patient should be transferred to a larger facility, about two hours away. Thanks to UpToDate, I was able to reassure the patient and his family that we were doing everything the other facility would do, and given his condition, a transfer would cost him valuable time, and delay treatment. If I had not had access to UpToDate, I would have said, "Put him in an ambulance and send him right now!"

One of the things I appreciate most about UpToDate is that it's not just academic. Plenty of websites discuss the academic aspect of a diagnosis, but UpToDate combines physiology with what you need if you're the "boots on the ground," and that is invaluable.

I've been lucky to have access to UpToDate throughout my career. I first started using it in medical school and now it's a key resource in my daily practice. When I completed my residency, I went to a rural area and was the only internist in the county. There also weren't any specialists, so I was standing in as a neurologist, a cardiologist, and more. Yet, I

was able to see and treat patients every day because UpToDate provided me with excellent, current information.

BIOGRAPHY

Dr. Shannon Heinrich is an Internist and Hospitalist practicing in Muscle Shoals, Alabama.

ALGORITHM 1

