



Toxicology Consultants of Arizona
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Rattlesnake Bite Care in the Emergency Department FAQs

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Does every rattlesnake bite require antivenom?

- No. Dry bites (no venom) occurs in about 20% of patients and require no antivenom and just observation.

What are some of the signs and symptoms of rattlesnake bites?

- Nausea, vomiting, diarrhea, numbness, tingling, weakness, increased heart rate, metallic taste
- Local wound problems: Necrosis, skin discoloration, swelling, fang marks
- Anaphylaxis: decreased respirations, face and tongue swelling, hypotension, rash, wheezing, itching

Why do we treat rattlesnake bites?

- Venom causes severe irreversible tissue damage, severe pain, and can cause blood clotting problems that may lead to hemorrhage.

What are the indications for antivenom administration?

- Increased swelling and pain; decreased platelets and/or fibrinogen; increased PT/INR; respiratory distress, anaphylaxis

What is the name of the pit viper antivenom that is FDA approved?

- CroFab (sheep derived) is available. Ask the patient if they are allergic to sheep or papayas and pineapples (chemicals from these are used in the processing of the antivenom).

How long will it take to get the antivenom from the pharmacy?

- Please allow 30-60 minutes for this drug to be sent from the pharmacy. This STAT medication cannot be quickly mixed because the antivenom is difficult to reconstitute. Calling the pharmacy every 5 minutes will not result in this medication to be mixed any faster. It will just frustrate you.

If I have to mix antivenom, how can I make it dissolve faster?

- Fill the vial with as much normal saline as possible. Do not shake the vial but gently roll it around.

What is the dosing for CroFab?

- The typical dose is 4-6 vials IV to start. This bolus dose may be repeated depending on bite severity. Once the swelling, pain and lab abnormalities are controlled, meaning the swelling and pain are not increasing, then maintenance antivenom is given to continue to remove venom. CBC, fibrinogen, PT/INR are taken after each dose is infused.

What should I do when I am taking care of these patients?

- Cardiac monitor and oxygen
- 2 large bore IVs with IV fluids running (1-2 liter boluses are common, then 1.5 to 2X maintenance in patients without cardiac problems)
- Check tetanus status and administer tetanus booster if necessary
- Pain control with narcotic pain medications [fentanyl or hydromorphone (Dilaudid)], antiemetics such as ondansetron (Zofran)



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- Monitor for anaphylaxis to the antivenom. Treat reactions with antihistamines, steroids, and epinephrine if the reaction is severe.
- Take measurements along the affected extremity in at least 3 places every 30 minutes until antivenom is started and then every hour after it has started. Record the measurement so the swelling can be tracked.
 - We do this to monitor the progression of swelling in the affected extremity
 - For example: If there is a hand bite, take measurements at the hand, forearm, and arm in centimeters. Mark the areas where the measurements are taken so there are consistent and reproducible. May mark the leading edge of swelling and write the time.

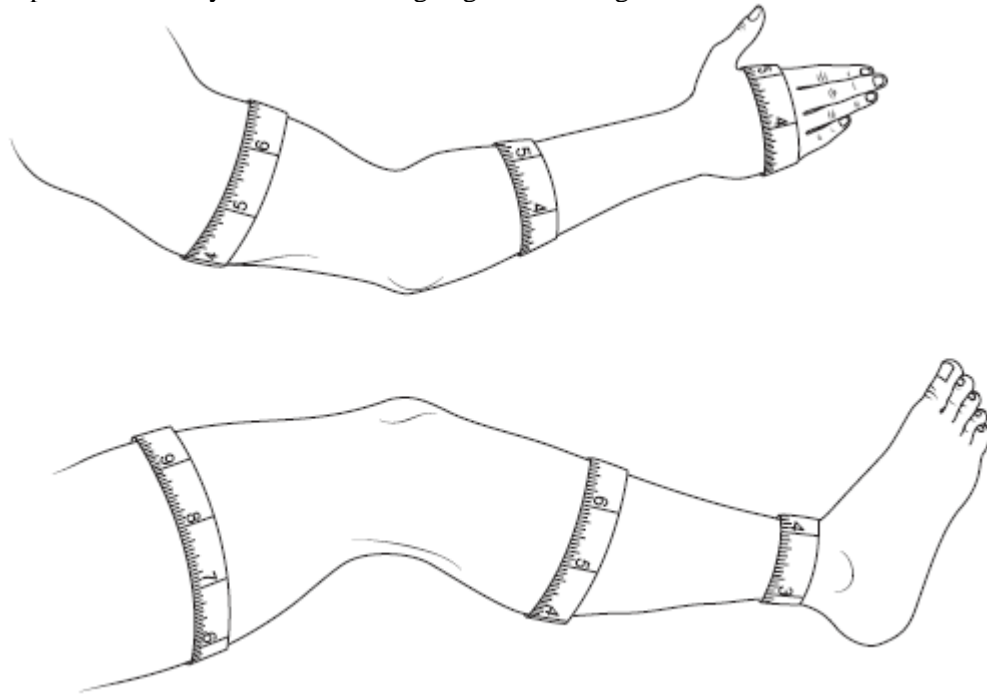


Fig. 6. Measuring the extremity to monitor for swelling.

From Quan, North American Poisonous Bites and Stings. Crit Care Clin 28(2012) 633-659.

- Record neurologic checks and check circulation (capillary refill) when taking these measurements. Check the firmness of the area (compartment syndrome).
- NO antibiotics, steroids, or antihistamines should be given.
- Monitor urine output since most patients have dehydration or rhabdomyolysis.
- Monitor for bleeding – hematemeses, hematuria, epistaxis, etc.
- Elevate the extremity. Upper extremities can be elevated using burn stocking and an IV pole.



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What should I do if I am out hiking and I get bitten by a rattlesnake?

- Don't panic! Get to the nearest hospital as soon as you can. Keep in mind that not all hospitals have antivenom. Use your mobile phone.
- Do NOT use tourniquets, ice, heat, aspirin/NSAIDs, rattlesnake bite kits or suction devices, or electric shock on the wound.