

Snake Envenomation

Toxicity

- Poisonous snakes indigenous to West Virginia are the timber rattlesnake and copperhead
- Dry bites (no envenomation) are possible
 - o 18-22% Rattlesnake
 - o 20% Copperhead
- Severe toxicity can occur with either however is less likely to occur with copperhead envenomation

Pathology

- Mild to Moderate: Local pain, progressive edema, ecchymosis, bullae/hemorrhagic bullae, necrosis
- Mild to severe systemic effects: thrombocytopenia, coagulopathies, respiratory failure or cardiac arrest
- True fascial compartment syndrome is rare however, local edema and swelling may occur

Initial Workup and Management

- Check baseline CBC/Diff, platelets, PT and PTT, fibrinogen, serum electrolytes, BUN, Creatinine and UA
 - o Repeat labs at least 6 hours after time of envenomation
- Establish IV access in unaffected limb
- Update tetanus as needed
- Swelling:
 - o Measure and document circumference of area at, above and below bite site every 15 minutes for the first hour and then every 4 hours until stabilized
 - o Do not apply ice as this can exacerbate local tissue damage
 - o Can elevate to heart level using non-compressive devices
- Routine use of antibiotics is NOT recommended

Antivenom Administration

- Crofab
 - o Initial dose 4-6 vials for mild to moderate symptoms. Initial dose 8-12 vials in patients with shock or serious active bleeding
 - If control not achieved after initial dose, can give additional 4-6 vials
 - o After initial control, consider additional 2 vials every 6 hours for 3 doses
 - Give for rattlesnake envenomation or continued systemic/local effects
 - o Monitor for anaphylactoid reactions
 - o Poison control center should be contacted for patients with severe reaction or those not responsive to initial doses (1-800-222-1222)
 - o Crofab website for further information https://crofab.com/getmedia/72de65cd-6368-4b74-9d4b-1631431133cf/US-CRF-2100123-Treatment-Algorithm-Poster_DIGITAL_FINAL_3.pdf