First Responder
EMT
AEMT
Paramedic

Universal Care 1-01

Wound Management & Immobilization

- **Cleanse**/gently irrigate the wound with saline or tap water.
- Dress wound with a small, loose dressing if actively bleeding.
- Remove rings, bracelets and other constrictive clothing from the extremity.
- **Splint/Immobilize the limb in a position of comfort** to limit movement. (Maintain a neutral position, as above the heart may hasten venous drainage/venom spread and below the heart may worsen edema.)
- Monitor for signs of anaphylaxis (treat as per Allergic Reaction [M-02])

Mark the skin with the initial location of erythema and/or swelling and mark progression every 5-15 minutes.

Do NOTs!

- **DO NOT incise fang marks or apply suction.**
- **Do NOT use ice or a pressure dressing at or proximal to the wound.**
- **Do NOT use Tourniquets → if placed by bystanders, remove them immediately.**

Do NOT kill the snake!!! Take a picture if possible to help with identification.

- If bystanders killed the snake prior to arrival, please educate them not to do this in the future.
- *Never handle a dead snake* as the bite reflex remains intact for hours.

Provide Respiratory & Hemodynamic Support:

- **100% Oxygen by Non-Rebreather**, as per Airway/O2 Maintenance [A-01]
- **IV/IO Access**, per IV Protocol [1-03]
- **Fluid Resuscitation and Vasopressors**, per Medical Shock [M-06]

***For venomous snake bites*, Rapid Transport should be instituted to an ED capable of administering Antivenom (utilize Air Transport if >30-45 ground transport)**

E-04 SNAKE BITE		First Responder EMT AEMT Paramedic

NOTES:

- Non-Venomous Snakes
  - Multiple rows of tiny puncture marks (versus 1-2 fang marks).
  - Only danger is with local wound healing and infection/sepsis.
- Crotalids/Pit Vipers (e.g. Copperheads, Rattlesnakes, Cottonmouths)
  - Have triangular-shaped head and elliptic (not round) pupils.
  - Pathophysiology: venom increases vascular permeability, causes hemolysis, systemic coagulopathy and local tissue necrosis.
  - Most bites only cause localized injury. Erythema and swelling should be marked and monitored as persistent extension/worsening is an indication for antivenom. Systemic symptoms are rare but can be deadly, especially in children. Only 25% of bites are considered “dry” bites (i.e. no venom was injected.)
- Elapids (e.g. Coral Snakes)
  - Red-on-yellow banding = BAD (“Red on yellow, kill a fellow. Red on black, venom lack.”), though coloring may vary somewhat.
  - Higher incidence of dry bites with coral snakes (50-70%).
  - Pathophysiology: Neuromuscular blockade via nicotinic acetylcholinesterase (ACh) receptor blockage. Minimal hemolysis/necrosis.
  - Symptoms = generalized neurologic symptoms: weakness, vision changes (blurry vision, diplopia, etc.), difficulty swallowing, etc. May progress to overt paralysis and associated respiratory failure.

QI Review Parameters:

1. Pending