# Snakebite Treatment Protocol

**BLS Patient Management**

- **Establish, maintain, and ensure:**
  - A. A patent and easily managed airway. Use manual maneuvers (head-tilt / chin-lift or jaw thrust), oropharyngeal suction and/or airway adjuncts (OPA / NPAs) as clinically indicated
  - B. Adequate respirations and tidal volume. Use a mouth-to-mask device or bag valve mask (BVM), when clinically indicated. Rescue ventilations via a BVM require the use of a manometer. Waveform / digital capnography is required when paramedics are present
  - C. Controlled bleeding. Use direct pressure and/or pressure dressing(s) and/or tourniquet(s) and/or hemostatic dressing(s), as clinically indicated

- **Oxygen**
  - As clinically indicated. Titrate to maintain, or increase, SpO₂ to a minimum of 94%. A range of 88-92% is acceptable for patients with a history of COPD

- **Attach ECG leads to the patient when a paramedic is present**

- **Comfort, calm, and reassure the patient. Restrict activity. Relocate any jewelry to the unaffected extremity**

- **Mark the edge of discoloration surrounding the bite, recording the time. Re-mark the edge every 15 minutes**

- **Do not handle the snake, whether dead or alive**

- **Do not apply a constricting band, elastic bandage, cold pack, or immobilization device to the affected extremity**

- **Position the patient as clinically indicated for safety, comfort, and to meet physiologic requirements**

**ALS Patient Management**

- **Establish, maintain, and ensure peripheral IV and/or IO access for emergency stabilization, and/or as clinically indicated, in adult and pediatric patients**

  Consider the need for additional sites as clinically indicated

  **Do not initiate IV/IO access in the affected extremity**

- **Interpret and continuously monitor ECG and vital signs**

- **For shock associated with snakebite**
  - **Adults:** 250 mL IV/IO bolus. **MAY REPEAT AS CLINICALLY INDICATED TO A MAX ADMINISTRATION OF 2 L.**

  **Pediatrics:** 20 mL / kg IV/IO bolus. Use a volume control administration set for accurate dosing. **MAY REPEAT AS CLINICALLY INDICATED.** For assistance with accurate dosing, refer to the REMSA PMDR or REMSA app.

  **Adults and pediatrics:** Push Dose Epinephrine 0.01 mg (1 mL, 0.01 mg / mL concentration) IV/IO. **MAY REPEAT PRN EVERY 1-5 MINUTES TO MAINTAIN A SYSTOLIC BP GREATER THAN:**

  - 90 mmHg – adults
  - 70 mmHg – pediatrics

- **For pain associated with a snakebite**
  - **Adults:** Fentanyl 50 mcg (1 mL) slow IV/IO push or IM/IN. Patient’s systolic BP must be greater than or equal to 90 mmHg at the time of administration. **MAY REPEAT ONCE, IN 5-10 MINUTES, DEPENDENT ON PAIN SEVERITY, TO A MAX OF 100 MCG. ADDITIONAL ADMINISTRATIONS AFTER 100 MCG REQUIRE A BASE HOSPITAL ORDER (BHO).**

  **Pediatrics:** Fentanyl 1 mcg / kg slow IV/IO push or IM/IN. **MAY REPEAT ONCE. ADDITIONAL ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).** For assistance with accurate dosing, refer to the REMSA PMDR or REMSA app.
**Adults:** Ketamine 0.3 mg / kg IVPB. Infuse in 50-100 mL Normal Saline, administer over 5 minutes. **MAY REPEAT ONCE. ADDITIONAL ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).**

**OR**

Ketamine 0.5 mg / kg IN. **MAY REPEAT ONCE. ADDITIONAL ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).**

**THE MAX SINGLE DOSE FOR EITHER ROUTE IS 30 MG.**

**ADMINISTRATION OF KETAMINE TO PEDIATRIC PATIENTS IS NOT PERMITTED.**

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**Patient Disposition**

- Do no delay transport with nonessential treatment of the transport ready snakebite patient
- Transport the patient to the closest receiving center