

Kittitas County Prehospital EMS Protocols

SUBJECT: CRUSH INJURY SYNDROME

Patients with CIS or suspension trauma may not survive if treatment is not initiated before removal from the situation. It is imperative that patients be pretreated before extrication or movement.

Hallmark signs experienced by the CS/CI patient include the "5 P's": pain, pallor, paresthesia, poikilothermy (cold skin) and pulselessness.

- A. Manage airway as indicated – if intubation necessary, **DO NOT use Succinylcholine**, consider **Vecuronium 0.1 mg/kg IV**.
- B. Apply oxygen.
- C. Establish peripheral IV access with **Isotonic Crystalloid** @ rate dependent on clinical findings. Always establish a large-bore line; consider two lines.
- D. **Albuterol 2.5 mg** in 3.0 ml **Istonic Crystalloid** continuously.
- E. The initial dosage for **Sodium Bicarbonate** is 1.0 mEq/kg IV bolus, after 10 minutes infuse 100 mEq Sodium Bicarbonate / 1000 ml of **Isotonic Crystalloid** @ 150 ml/hr. Volume replacement and pre-alkalization should take place immediately after CIS identified.
- F. ECG monitor.
- G. If dysrhythmias, stabilize excitable tissue with 1 amp (500 mg) of **Calcium Chloride IV** push over 2 – 5 minutes.
- H. If prolonged extrication, consider 1 amp (50 ml or 25 gm) **D50W**. Monitor blood glucose levels and consider giving an additional amp **D50W**.
- I. Consider **MS** 2 mg every 2 minutes or **Fentanyl** 25 µg IV every 5 – 10 minutes
- J. Consider **Midazolam 2 mg** increments to a maximum dose of 0.1 mg/kg or 10 mg for sedation.