CRUSH INJURY - ADULT/ADOLESCENT

✱✱✱ BASE HOSPITAL CONTACT REQUIRED ✱✱✱

The following orders apply to crush injury of muscular regions of the legs, pelvis, arms, and shoulders and do not apply to isolated crush injuries of hands or feet. Treat hand or foot crush injuries as isolated skeletal fractures (see T-05).

ALS STANDING ORDERS:

1. Assist ventilation with BVM when indicated.

2. Obtain pulse oximetry; if oxygen saturation less than 95%, administer:

   ► *High flow oxygen by mask or nasal cannula at 6 l/min flow rate as tolerated.*

3. IV access in unaffected limb and administer (IO access acceptable if unconscious or hypotension without IV attainable):

   ► *250 mL Normal Saline bolus, prior to release of compression force.*

4. For signs of hypovolemia or poor perfusion;

   ► *Continue Normal Saline as a wide open infusion to attain or maintain perfusion.*

5. For possible hyperkalemia secondary to crush injury release of potassium from injured tissue:

   ► *Albuterol, Continuous nebulization of 6.0 mL (5 mg) concentration as tolerated.*

6. If crush injury duration greater than one (1) hour:

   ► *Sodium bicarbonate (NaHCO3) one 50 mL prefilled syringe IV or IO (if already established for saline infusion).*

7. *Morphine sulfate or Fentanyl* as needed for pain, if BP greater than 90 systolic:

   ► *Morphine sulfate 5 mg (or 4 mg carpuject) IV/IM; or IO (if already established for saline infusion); may repeat once in 3 minutes to control pain;*
   OR,
   Fentanyl 50 mcg IV/IM or Fentanyl 100 mcg IN, may repeat once in 3 minutes to control pain.

8. Release compression and extricate patient.

9. For uncontrolled bleeding, apply direct pressure or hemostatic dressings.

10. Non-compressive splints as needed.

11. ALS escort, contact Base Hospital for PTRC designation/destination.

TREATMENT GUIDELINES:

- Confined space and MCI situations may not allow time for treatment prior to release of crush weight. Ideally, treatment should be started prior to release of compression.

- Hydrate intravenously prior to release of compression to reverse hypovolemia and to dilute cellular toxins.