



CRUSH INJURY SYNDROME

Effective: January 1, 2021
Replaces: April 27, 2017
Review: January 1, 2023

1. BLS Treatment

- 1.1. Routine Medical Care – Adult **(700-S04)**
 - 1.1.1. **Oxygen – High Flow**, assist with ventilations as appropriate
- 1.2. Treat for signs and symptoms of shock as appropriate **(700-A10)**
- 1.3. Control bleeding as appropriate
- 1.4. Spinal Motion Restriction as appropriate **(700-M11)**
- 1.5. If pulseless, treat for cardiac arrest as appropriate **(700-A07)**

2. ALS Treatment

- 2.1. **Vascular Access (IV)**
 - 2.1.1. If accessible, establish a second vascular access
 - 2.1.2. **1,000ml Fluid bolus**
- 2.2. If chest is accessible, obtain **12 Lead ECG** (monitor for signs of hyperkalemia)

3. Suspected hyperkalemia (peaked T-waves, absent P-waves, or widened QRS)

- 3.1. **Albuterol 5mg in 6ml normal saline** via nebulizer
- 3.2. **Sodium Bicarbonate 1mEq/kg IV**, delivered over sixty (60) seconds
- 3.3. **Calcium Chloride 1gm IV**
- 3.4. Flush the IV tubing well between injections when administering Calcium Chloride and Sodium Bicarbonate in sequence. When these drugs are mixed, a milky precipitate (calcium carbonate) may result

4. Special Considerations

- 4.1. Consider pain management, if systolic blood pressure greater than 100 mmHg; **Morphine 2–5mg IV**, every 3-5 minutes, titrated to pain, max dose 20 mg
- 4.2. **BASE CONTACT**: If additional Morphine above 20 mg is needed
- 4.3. Extensive areas of involvement such as lower extremities and pelvis
- 4.4. Crush syndrome may develop in one hour in a severe crush situation, usually requires compression from four (4) to six (6) hours
- 4.5. If a physician is needed at the scene for surgical extrication see **(Policy 616)**