

ADULT TREATMENT GUIDELINES

TRAUMA

CRUSH INJURY (A90)

Crush Injury Syndrome is the systemic manifestation of muscle crush injury & cell death. Crush injury syndrome should be suspected in patients with an extensive area of involvement such as a lower extremity or pelvis. Also, the crushing force must be present for some time for crush injury syndrome to occur. The syndrome may develop after one hour in a severe crush situation, but usually takes 4 – 6 hours of compression.

	F	E	P	D
SECURE AIRWAY - As appropriate.	X	X	X	
PULSE OXIMETRY	X	X	X	
OXYGEN - As appropriate.	X	X	X	
ECG MONITOR - As soon as access allows.	X	X	X	
PRIOR TO RELEASE OF COMPRESSION				
VASCULAR ACCESS - IV/IO. Attempt at least 2 large bore IVs. Administer 250ml fluid boluses as indicated to a BP range of ≥ 90 . Reassess the patient after each bolus. Contact base for fluid orders if suspected uncontrolled hemorrhage or if BP cannot be maintained after 2 liters have been infused.			X	
ALBUTEROL - Nebulizer using 2.5 mg. If patient is intubated, administer dose through aerosol holding chamber. May repeat if needed.			X	
*TRANEXAMIC ACID – 1gm in 100 cc of NaCl infused over 10 minutes			X	
AFTER RELEASE OF COMPRESSION				
CONTROL OBVIOUS BLEEDING	X	X	X	
**CALCIUM CHLORIDE - For suspected hyperkalemia. 1 gm IV/IO over 5 minutes, followed by 20 ml NS flush.				X
**SODIUM BICARBONATE DRIP - For suspected hyperkalemia. Mix 100 mEq in 1000 ml NS wide open.				X
SPINAL MOTION RESTRICTION - If indicated.	X	X	X	
POSITION - Trendelenberg if tolerated. If long spine board is indicated, tilt spine board 30°. If pt is >6 months pregnant place patient in left lateral decubitus position.	X	X	X	
TRANSPORT - Per trauma triage protocol.	X	X	X	
DRESS & SPLINT - As needed.	X	X	X	

* TXA should be administered to trauma patients who meet the following criteria unless otherwise indicated:

1. Systolic BP of less than 90 mmHg.
2. Uncontrolled bleeding

** Hyperkalemia is suspected with compression ≥ 4 hours with an abnormal ECG (peaked “T” wave, absent “P” wave or widened “QRS”).

Refer to A 91 PAIN MANAGEMENT

Provider Key

F = First Responder

P = Paramedic

E = EMT

D = Base Hospital Physician Order Required

EFFECTIVE: 08-01-2019