

Crush Injuries

Legend	
	EMR
	EMT
	Intermediate
	Paramedic
	Medical Control

Critical Thinking:
Scene safety may include an unstable object or ground, inhalation precautions, and precautions for sharp objects. You must be trained in these matters to effectively treat the patient.

A crushed extremity that is suddenly freed may release a bolus of potassium into the patient's blood stream which can cause lethal arrhythmias. A 12-lead should be performed before and after the extremity is released. If the extremity has been entrapped for more than 1 hour, contact Medical Control to discuss using a tourniquet to block potassium release while transporting the patient to a Trauma Center.



EMR	<ol style="list-style-type: none"> 1. Routine trauma care. 2. Assess all unaffected areas, with attention to airway management and bleeding control 3. If extremity is entrapped more than 1 hour apply a tourniquet to the affected side as close to the injury as possible. Tourniquet may be used to control bleeding as well. 	EMR
EMT	<ol style="list-style-type: none"> 4. Call for ALS to come to scene. 5. Consider a continuous Albuterol 2.5mg/3mL via nebulizer with O2 6-8 lt/min. up to 15mg for suspected hyperkalemia 6. Consider Zofran ODT 4mg for nausea and vomiting- BLS only 7. Contact receiving hospital 	EMT

I	<ol style="list-style-type: none"> 1. Continue EMR/EMT care. 2. Start two large bore IVs in unaffected limb. Give fluid bolus 20mL/kg NS to maintain an SBP of 90mmHg. Consider IO if unable to establish IV. 3. Obtain and transmit a 12-lead if possible, assessing for tall or peaked t-waves (hyperkalemia). 4. Call for an ALS intercept for any patient with prolonged extrication time 5. Consider a continuous Albuterol 2.5mg/3mL inhaler up to 15mg for suspected hyperkalemia 6. Fentanyl 50 mcg SLOW IV push. If no relief, you may repeat x 1 for total dose of 100mcg. Fentanyl 50 mcg IN, if unable to access IV. May repeat x 1 for total dose of 100 mcg. 	I
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P	<ol style="list-style-type: none"> 1. Continue ILS care. 2. Maintain SBP above 90mmHg before, during and after release. 3. Consider advanced airway, especially for decreasing level of consciousness. See medication assisted intubation. 4. Consider Zofran 4mg for nausea and vomiting. 5. For Entrapment over 60 minutes and Systolic BP 90mmHg or greater, consider adding 50mEq Sodium Bicarbonate to 1000 ml NS. Infuse a 500mL bolus, then run the remaining 500mL over 30 minutes. 6. Consider a continuous Albuterol 2.5mg/3mL inhaler up to 15mg for suspected hyperkalemia. 7. Fentanyl 50 mcg SLOW IV push. If no relief, you may repeat x 1 for total dose of 100mcg. Fentanyl 50 mcg IN, if unable to access IV. May repeat x 1 for total dose of 100 mcg. If fentanyl ineffective, give Dilaudid 0.5-1.0mg IV/IO over 2-5 minutes. May repeat in 5 minutes, max dose of 2mg. SBP must be >100mmHg. 8. Contact Medical Control if a patient is entrapped, extrication is going to be prolonged and they are unstable to discuss using the Field Amputation SMO. 	P
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