





Crush Syndrome

Injury





CRITERIA

Consider crush syndrome if the patient has a trapped extremity or torso with compression and compromise of vascular supply that has lasted more than 60 minutes

PROTOCOL

EMR	Follow <i>General – Universal Patient Care/Initial Patient Contact protocol.</i>	EMR
A	Prior to extrication administer 20 mL/kg 0.9% Normal Saline IV/IO up to 1000mL Bolus For prolonged extrication continue with 0.9% Normal Saline 10 mL/kg/hour IV/IO	A
[I]	To the above IV/IO fluid, add Sodium Bicarbonate 1 mEq/kg up to 50 mEq to 0.9% Normal Saline fluid bolus to first liter only	[I]
[I]	For patient having any of the following ECG changes: <ul style="list-style-type: none"> • Peaked T waves • Wide QRS complex • Short QT interval • Absent P waves Administer in a second IV/IO line: <ul style="list-style-type: none"> • Calcium Chloride 1 g slow IV/IO over 10-15 minutes followed by 40 ml 0.9% Normal Saline flush • Sodium Bicarbonate 1 mEq/kg and repeat in 10 minutes if no change and medications are available. • Continuous Albuterol Sulfate (Proventil) (3 mL 0.083% Solution) via nebulizer or BVM 	[I]
MC	Contact medical control for persistent ECG abnormalities	MC
EMT	Remove patient from entrapment and begin transport per <i>Administrative Policy – Trauma Field Triage.</i>	EMT
A	Continue to administer 0.9% Normal Saline 5 mL/kg/hour IV	A
	See <i>General – Pain Control protocol.</i>	

PEARLS

-  Initiate protocol treatment prior to removal of compression mechanism
-  Consider any ECG change to be a sign of instability: any ECG change warrants immediate treatment with calcium chloride.
-  Prioritize life over limb
-  Albuterol in this case is only for ECG changes and for this reason is an I/P skill only for this indication