



El Dorado County Emergency Medical Services Agency

Quick Reference

Revised Date: July 1, 2020

Medication Profile

Calcium Chloride (CaCL₂)

Class:

Inotropic Agent (Electrolyte)

Action:

Replenishes a necessary element (Ca⁺⁺) which is necessary for nerve and muscle function, as well as cardiac function and blood clotting. Increases contractile force (inotrope), prolongs systole, and increases myocardial automaticity.

Onset: Immediate

Peak: N/A

Duration: 0.5-2 hours

Adult Administration:

Hyperkalemia/Overdose of Calcium Channel Blockers:

10mg/kg Slow IV/IO push (Base Order)

Crush Syndrome:

1gram IV/IO slow over 5 min. Repeat if symptoms persist. (flush line with NS before and after administration)

- Compression equal or greater than 4 hours and absent P waves, Peaked T waves, and/or prolonged QRS complex

Pediatric Administration:

Hyperkalemia/Overdose of Calcium Channel Blockers:

20mg/kg (0.2ml/kg) slow IV/IO push. Base MD Order

Crush Syndrome:

20mg/kg slow IV/IO push over 1 min (Base Order)

Repeat if symptoms persist (Flush line with NS before and after administration).

- Compression equal or greater than 4 hours and absent P waves, Peaked T waves, and/or prolonged QRS complex

Indications:

Hyperkalemia associated with crush injury

Overdose of calcium channel blockers

Contraindications:

Pt's taking digitalis based medications

Side Effects:

CV: Hypotension, bradycardia arrhythmias, cardiac arrest, venous thrombosis CNS:

Headache, confusion, psychosis, brain cell injury

GI: Nausea, vomiting, anorexia MS:

Joint pain

GU: Polyuria

Pregnancy:

Category C

Notes:

- IV line must be flushed between Calcium Chloride and Sodium Bicarbonate to avoid precipitation.
- Observe IV site closely. Extravasation may result in tissue necrosis. Slow IV push.