

CALCIUM CHLORIDE

Additional Names: Calcium Replacement

Classification: Electrolyte, Antidote

Indications: Ca^{2+} Channel Blocker overdose
Cardiac Arrest secondary to suspected hyperkalemia
Suspected hypocalcemia.
Hypermagnesemia (Magnesium Sulfate overdose)

Contraindications: Known hypersensitivity
Digoxin Overdose
Hypercalcemia

Dosages: **Adult:**
Overdose / Acute Poisoning: Ca^{2+} Channel Blocker OD
500-1,000mg IV/IO infusion over 10-20min *w/Medical Control orders.
Cardiac arrest w/ known or suspected hyperkalemia or renal disease/dialysis
1g IV/IO

Crush Injury / Syndrome: Signs of Hyperkalemia present
1g IV/IO over 10min, not to exceed 1mL/min

Pediatric:
Cardiac arrest w/ known or suspected hyperkalemia or renal disease/dialysis
20mg/kg IV/IO, max 1g

Side Effects: Sensation of "heat wave" or tingling, local burning sensation

Physiological Effects: Calcium is an essential component for proper functioning nervous, muscular, skeletal, and endocrine systems and includes positive inotropic (contractility) and dromotropic (conduction speed) effects. It is believed to help reduce dysrhythmia caused by hyperkalemia by stabilizing the cardiac membrane resting potential.

Massive hemorrhage leads to a hypo calcemic state which prevents proper coagulation. Administration of calcium chloride replaces that lost calcium supporting the body's coagulation cascade.

Additional Info: Irritation with extravasation *(may cause tissue necrosis)
Rapid IV administration may cause sensation related to side effects.
Cardiotoxicity and local phlebitis with rapid IV administration
Use caution in patients with renal insufficiency or history of cardiac disease.