Calcium Chloride 10% – 20.080

CLASS A: Hyperkalemia, Premedication for Antidysrhythmic Use
CLASS B: Calcium Channel Blocker OD (Except Cardiac Arrest), Hydrogen Fluoride exposure

PROTOCOL(S) USED IN: Cardiac Arrest, Cardiac Dysrhythmia Tachycardia, Hyperkalemia, Poisoning & Overdoses

PHARMACOLOGY AND ACTIONS:
Increases the force of myocardial contraction by initiation of myofibril shortening. The positive inotropic effects and vasoconstricting effects produce a rise in systemic arterial pressure.

INDICATIONS:
1. Hyperkalemia
2. Suspected Calcium Channel Blocker OD
3. Hypotension prior to antidysrhythmic use
4. Hydrogen Fluoride exposure

CONTRAINDICATIONS:
Hypercalcemia and hypercalciuria (hyperthyroidism, Vitamin D overdose, bone metastases)
Patients on Digoxin
When administered in the same IV as Sodium Bicarbonate

SIDE EFFECTS AND NOTES:
A. Extravasation of Calcium salts will cause necrosis of tissue. The IV should be secured and free blood return into the syringe should be checked 2-3 times during administration. If extravasation does occur, immediately stop administration.
B. Administer slowly (no faster than 200 mg/min) and stop if patient complains of distress. Inject using a small needle into a large vein.
C. Rapid injection of Calcium may cause vasodilatation, decreased blood pressure, bradycardia, cardiac arrhythmias, syncope and cardiac arrest. May produce coronary and cerebral artery spasms.
D. One preloaded vial of 10 ml Calcium Chloride contains 1 g of calcium chloride salt (= 270 mg elemental calcium or 14 mEq calcium or 7 mmol calcium)

ADULT DOSING:

Premedication to Diltiazem (Systolic BP <90 mmHg): 500 mg slow IV/IO
Hyperkalemia: 1 g slow IV/IO over 5-10 minutes
Calcium Blocker OD: Contact OLMC - 1 g slow IV/IO over 5-10 minutes
Hydrogen Fluoride Exposure: Contact OLMC - See Exposure Protocol

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PEDIATRIC DOSING:
Hyperkalemia, Calcium Channel Blocker Overdose:
20 mg/kg slow IV/IO over 5 – 10 minutes. Max dose 1 g - **Contact OLMC for OD**