Calcium Chloride 10% – 20.070

CLASS: A

PROTOCOL(S) USED IN: Hyperkalemia, Cardiac Dysrhythmias - Tachycardia, Cardiac Arrest - VF/ Pulseless Vtach, Cardiac Arrest - Asystole, Cardiac Arrest - PEA, Poisoning and Overdose, Sodium Bicarbonate

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:
A. In cardiac arrest setting
    1. Hyperkalemia secondary to renal failure.
    2. Hypocalcemia due to multiple blood transfusions.
    3. Known or suspected calcium channel blocker overdoses.
B. Hyperkalemia
    1. If hyperkalemia is suspected: See Hyperkalemia protocol.

CONTRAINDICATIONS:
None

PRECAUTIONS:
A. CANNOT BE ADMINISTERED WITH SODIUM BICARBONATE unless *thoroughly flushing IV Line.*

SIDE EFFECTS AND NOTES:
A. Extremely important to *flush the IV line* between administration of sodium bicarbonate and calcium chloride to avoid precipitation.
B. May produce coronary and cerebral artery spasms.
C. Should be used with caution in patients receiving digitalis; may precipitate toxicity.

ADULT DOSING:
Cardiac Arrest
1000 mg slow IV/IO *over 5 - 10 min*. May repeat x1.
Hyperkalemia
1000 mg slow IV/IO *over 5 - 10 min* in a proximal port. May repeat x1.
Calcium Channel Blocker Overdose
1000 mg slow IV/IO over 5-10 min in a proximal port. May repeat x1.
Hydrogen Fluoride Exposure:
For inhalation victims-
Administer **Calcium Chloride** *by nebulizer. Mix 1 ml of 10% Calcium Chloride with 3 mls of Normal Saline into the nebulizer.*

Optical Exposure

1. Irrigate exposed eyes with a **1% Calcium Chloride aqueous solution** (10 ml of 10% Calcium Chloride solution in 90 ml of sterile saline bag) using a NC Up to 500 ml over 1 to 2 hours may be used.

PEDIATRIC DOSING:

Hyperkalemia / Cardiac Arrest

20 mg/kg slow IV/IO *over 5 – 10 min*. Max dose is 1 gram.

Calcium Channel Blocker Overdose

Contact OLMC