

Calcium Chloride 10% – 20.080

CLASS A: Premed and Hyper K

CLASS B: Calcium Channel OD

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:

- A. Premedication to Diltiazem if systolic BP <90 mmHg
- B. Suspected Hyperkalemia not in cardiac arrest setting
- C. 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.

CONTRAINDICATIONS:

- A. **CANNOT BE ADMINISTERED WITH SODIUM BICARBONATE**
- B. In presence of sodium bicarbonate, calcium salts will precipitate as carbonates.

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:

Premedication: 500 mg or 5 ml slow IV/IO push

Hyperkalemia: 10 ml slow IV/IO over 5-10 minutes

Calcium Blocker OD: Contact OLMC for 10 ml slow IV/IO over 5-10 minutes

PEDIATRIC DOSING:

Hyperkalemia: 20 mg/kg slow IV/IO push