CALCIUM CHLORIDE
(KAL-see-um KLOH-ryd)
Calcium Salt

PHARMACOLOGICAL CLASSIFICATION:
-calcium supplement

THERAPEUTIC CLASSIFICATION:
-agent for electrolyte balance
-cardiotonic

MECHANISM OF ACTION:
-causes a significant increase in the myocardial contractile force and increases ventricular automaticity
-calcium is essential for maintaining the functional integrity of the nervous, muscular, and skeletal systems, and for cell membrane and capillary permeability

INDICATIONS:
-hyperkalemia (dangerously high potassium level)
-hypocalcemia (dangerously low calcium level)
-calcium channel blocker toxicity

CONTRAINDICATIONS:
-patients taking digitalis (precipitates toxicity)
-hypercalcemia

SIDE EFFECTS:
-CNS: tingling sensations, headache, weakness, syncope
-CV: mild fall in BP, vasodilation, bradycardia, arrhythmias, cardiac arrest (with rapid IV administration)
-vein irritation (with IV use)

INTERACTIONS:
-use with cardiac glycosides increases digitalis toxicity
-calcium may antagonize the effects of calcium channel blockers
-should not be mixed with bicarbonates, sulfates, or phosphates (precipitate formation)

DOSAGE:
-250-500 mg IV, may be repeated every 10 minutes

SPECIAL INFORMATION:
-extravasation can cause severe necrosis, sloughing, or abscess formation
-be sure to flush the IV line between administrations of calcium chloride and sodium bicarbonate