



13. DILTIAZEM (CARDIZEM®)

a) Class

Calcium channel blocker

b) Actions

- (1) Inhibits the movement of calcium ions across cardiac muscle cells
- (2) Decreases conduction velocity and ventricular rate

c) Indications

Symptomatic atrial fibrillation and atrial flutter

d) Contraindications

- (1) Hypotension below 100 mmHg, second or third degree heart block, hypersensitivity to the drug
- (2) Patients less than 18 years of age

e) Precautions

Use cautiously in patients with renal failure or congestive heart failure.


f) Side effects

- (1) Headache
- (2) Nausea
- (3) Vomiting
- (4) Bradycardia
- (5) Hypotension

g) Significant interactions

Congestive heart failure may result if used along with beta blockers.

h) Dosage

- (1) Adult
 - (a) 0.25 mg/kg (maximum dose 20 mg) by IV bolus administered SLOW IV over 2 minutes; if response is not adequate, repeat in 15 minutes with a dosage of 0.35 mg/kg (maximum dose 25 mg) over 2 minutes.
 - (b) For patients older than 50 years of age, borderline blood pressure, known renal failure, or CHF, consider initial bolus 5–10 mg administered IV over 2 minutes.
- (2)  Pediatric:
Contraindicated for patients less than 18 years of age. If needed, consult Pediatric Base Station.



i) Overdose or Toxicity Presentation

Generally consists of exaggeration of side effects, including severe hypotension and symptomatic bradycardia

j) Treatment of Overdose or Other Adverse Reactions

- (1) Give general supportive measures, monitor vitals, administer oxygen.
- (2) Hypotension:
 - (a) If lungs are clear, administer fluid bolus 20 mL/kg of LR; titrate to a systolic blood pressure of 100 mmHG.
 - (b) If rales are present, administer fluid bolus, maximum of 250 mL of LR. Titrate to a systolic of 100 mmHg.
 - (c) Administer calcium chloride 500 mg SLOW IVP.
- (3) Bradycardia: Consider atropine (0.5 to 1 mg); if necessary, consider pacing.