

Diltiazem (Cardizem®) - 20.100

CLASS: A

PROTOCOL(S) USED IN: Cardiac Dysrhythmia Tachycardia

PHARMACOLOGY AND ACTIONS:

A calcium channel blocker that inhibits calcium ion influx across cardiac and smooth muscle cells, decreasing myocardium contractility and oxygen demand.

INDICATIONS:

- A. Rapid atrial fibrillation or atrial flutter

CONTRAINDICATIONS:

- A. Sick sinus syndrome or second or third degree AV block in the absence of an artificial pacemaker.
- B. Systolic BP below 90 mmHg.
- C. Wide complex irregular tachycardia (suspected Wolff-Parkinson-White Syndrome)

SIDE EFFECTS AND NOTES:

- A. Can cause bradycardia, heart block, and hypotension
- B. First consider and treat causes of atrial fibrillation/flutter with RVR similar to treatment of sinus tachycardia with interventions including IV fluid resuscitation.
- C. RVR is often a result of other pathology such as hypovolemia, hemorrhage, sepsis, pain, etc. Administration of AV nodal blockade in these situations can cause catastrophic loss of compensatory tachycardia and circulatory collapse.

ADULT DOSING:

- A. **0.25mg/kg** slow IV/IO push. Max of 25 mg.
- B. If no response, **0.35mg/kg** slow IV/IO push after 15 minutes. Max of 25mg.

DILTIAZEM							
1st Dose				2nd Dose			
Weight		0.25MG/KG	ML	Weight		0.35MG/KG	ML
100 lbs	45 kg	11.3 mg	2.3 ML	100 lbs	45 kg	15.8 mg	3.2 ML
110 lbs	50 kg	12.5 mg	2.5 ML	110 lbs	50 kg	17.5 mg	3.5 ML
120 lbs	54 kg	13.5 mg	2.7 ML	120 lbs	54 kg	18.9 mg	3.8 ML
130 lbs	59 kg	14.8 mg	3 ML	130 lbs	59 kg	20.7 mg	4.1 ML
140 lbs	63 kg	15.8 mg	3.2 ML	140 lbs	63 kg	22 mg	4.4 ML
150 lbs	68 kg	17 mg	3.4 ML	150 lbs	68 kg	23.8 mg	4.8 ML
160 lbs	73 kg	18.1 mg	3.6 ML	160 lbs	73 kg	25 mg	5 ML
170 lbs	77 kg	19.3 mg	3.9 ML	170 lbs	77 kg	25 mg	5 ML
180 lbs	82 kg	20.5 mg	4.1 ML	180 lbs	82 kg	25 mg	5 ML
190 lbs	86 kg	21.5 mg	4.3 ML	190 lbs	86 kg	25 mg	5 ML
200 lbs	91 kg	22.7 mg	4.5 ML	200 lbs	91 kg	25 mg	5 ML
210 lbs	95 kg	23.8 mg	4.8 ML	210 lbs	95 kg	25 mg	5 ML
220 lbs	100 kg	25 mg	5 ML	220 lbs	100 kg	25 mg	5 ML
MAX DOSE OF DILTIAZEM IS 25MG							
DOSE CALCULATED FOR 25MG/5ML CONCENTRATION							

Pediatric Dosing: None