

VERAPAMIL (CALAN)

Drug Classification: Calcium channel blocker

BACKGROUND

Pharmacodynamics

This medication blocks calcium from moving into the heart muscle cell, which prolongs the conduction of electrical impulses through the AV node. Also causes arterial dilatation. Onset is 5 minutes.

Indications

- Atrial fibrillation or atrial flutter: Temporary control of rapid ventricular rate in atrial fibrillation or atrial flutter.
- Symptomatic PSVT that returns or does not convert with administration of **adenosine (Adenocard)**.

Contraindications

- Patients with atrial fibrillation or atrial flutter associated with an accessory bypass tract such as in Wolff-Parkinson-White (WPW).
- Patients with a second or third degree AV block, **except** in the presence of a functioning ventricular pacemaker.
- Patients with severe hypotension or cardiogenic shock (BP less than 90 systolic).
- Known hypersensitivity or allergy to the medication.
- Patients with ventricular tachycardia. Administration of calcium channel blockers to patients with wide complex tachycardia (QRS>0.12 seconds) has resulted in hemodynamic deterioration and ventricular fibrillation.

Cautions

- May cause hypotension. Be prepared to provide cardiovascular support.

DOSAGE and ADMINISTRATION

ADULT	PEDIATRICS (less than 60 kg)
<ol style="list-style-type: none"> 1. Administer 5 mg IV/IO slowly over 2 minutes 2. For patients greater than 65 years of age or with a systolic blood pressure less than 100 mmHg, administer 2.5 mg IV/IO slowly over 2 minutes. 3. If no change, may repeat initial dose every 5 minutes to a maximum total dose of 20 mg. 	<ol style="list-style-type: none"> 1. Administer 0.2 mg/kg (max dose 5 mg) IV/IO slowly over 2 minutes. 2. May repeat once.

ADVERSE REACTIONS/SIDE EFFECTS

- Dizziness, headache, nausea, flushing, diaphoresis
- Syncope, hypotension, bradycardia

NOTES

REFERENCE GUIDELINE:

2H: Paroxysmal Supraventricular Tachycardia (PSVT)

2J: Atrial Fibrillation/Flutter