



3. ADENOSINE (ADENOCARD®)

a) Pharmacology

- (1) Naturally occurring purine nucleoside
- (2) Used to treat narrow complex tachycardia, PSVT with WPW
- (3) Slows conduction through the AV node
- (4) No effect on ventricular contractility
- (5) Causes peripheral vasodilatation (often dramatic)

b) Pharmacokinetics

Onset of action within 5–20 seconds following an IV dose;
half-life is 10 seconds

c) Indications

- (1) To slow the rate of narrow complex tachycardia
- (2) Is only effective on SVT/PSVT
- (3) No effect on VT, atrial fibrillation, or flutter
- (4) In stable, wide complex tachycardia (possible VT) for pediatric with caution

d) Contraindications

- (1) Known hypersensitivity
- (2) History of moderate to severe asthma or active bronchospasm
- (3) Polymorphic or irregular wide complex tachycardia

e) Adverse Effects

Flushing, dyspnea, chest pressure, nausea, headache, dizziness,
and hypotension

f) Precautions

- (1) Effects antagonized by theophylline.
- (2) Effects enhanced by dipyridamole (Persantine®), digitalis, carbamazepine, calcium channel blockers, and benzodiazepines.
- (3) Be prepared for up to 40 seconds of asystole

g) Dosage

- (1) Adult:
6 mg rapid IVP bolus followed by a rapid flush
Give 12 mg if no response within 2 minutes.
Give 12 mg more if no response within another 1–2 minutes.



REDUCE DOSAGE BY HALF FOR PATIENTS WITH TRANSPLANTED HEARTS AND THOSE TAKING DIPYRIDAMOLE OR CARBAMAZEPINE.

- (2) Pediatric: 0.1 mg/kg rapid IVP/IO; maximum initial dose 6 mg.
Second and third doses: 0.2 mg/kg rapid IVP/IO; maximum single additional dose 12 mg.