

ICU/ED/CSDU/PACU – Unit Practice Manuals  
John Dempsey Hospital – Department of Nursing  
The University of Connecticut Health Center

**PROTOCOL FOR: Diltiazem (Cardizem) Infusion: for Treatment of Atrial Tachyarrhythmia**

- POLICY:**
1. Patient must be on a cardiac monitor during infusion and for 4 hours post-infusion.
  2. Medication must be run on an infusion pump, using drug guardrail.
  3. A specific MD/LIP order must be obtained for dose adjustments.

**INDICATION:** Heart rate control in atrial tachyarrhythmia (rapid atrial fibrillation/flutter, or paroxysmal supraventricular tachycardia).

**DESIRED PATIENT**

- OUTCOMES:**
1. Patient will maintain hemodynamic stability during infusion.
  2. Patient will convert to baseline rhythm and rate.

**CLINICAL  
ASSESSMENT AND**

- CARE:**
1. Obtain baseline vital signs, rhythm strip with interval measurements and labs (i.e., electrolytes).
  2. Prepare infusion: dilute **125mg in 100ml D5W – yields 125 mg/125 ml** (1 mg/1 ml) when mixed.
  3. Usual Dose: initial bolus (undiluted): **0.25 mg/kg** (20 mg average dose) IVP over 2 minutes; may repeat in 15 minutes at a dose of 0.35 mg/kg (20-25 mg) over 2 minutes, then begin infusion at 5-15 mg/hr, per specific MD/LIP order. **15 mg/hr is maximum dose.** Drip may be continued for up to 24 hours.
  4. Monitor vital signs **q 15 x 2, then q 30 minutes x 2**, then per unit protocol. Be alert for hemodynamic changes (SBP  $\leq$  90, HR  $\leq$  60), as Diltiazem is a calcium channel blocker. Diltiazem should be used cautiously when administered with IV beta-blockers. Report bradycardia or hypotension promptly.
  5. Obtain rhythm strip with any change in rhythm or patient status.
  6. When the patient's heart rate is under control, the patient may be switched to a PO dose, per MD/LIP order.
  7. The infusion can be discontinued 1 hour after the first oral dose is given.

**PATIENT**

- EDUCATION:**
1. Inform patient/family about medication, need for ECG monitoring and frequent vital signs.
  2. Instruct patient to report any complaints, specifically: dizziness, headache, nausea, dyspnea or peripheral edema.

**APPROVAL:** Nursing Standards Committee  
ICU Standards Committee  
ED Standards Committee  
CSDU Standards Committee

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EFFECTIVE DATE: 3/00

REVISION DATES: 8/02, 10/03, 9/05, 5/09

REVIEWED DATES: 2/06, 3/08, 9/08, 10/09