

**DILTIAZEM (CARDIZEM) CONTINUOUS INFUSION – ICU**

<b>PURPOSE:</b>	To outline the management of patient(s) receiving diltiazem infusion.
<b>SUPPORTIVE DATA:</b>	<p>Diltiazem is indicated for temporary control of acute atrial fibrillation, atrial flutter, and conversion of paroxysmal supraventricular tachycardia with rapid ventricular rates.</p> <p>Diltiazem is contraindicated in sinus bradycardia, second and third degree heart blocks and hypotension.</p> <p>Drugs that potentiate action of diltiazem include: Beta blockers, digoxin, antihypertensives, diuretics, and other calcium channel blockers.</p>
<b>ASSESSMENT:</b>	<ol style="list-style-type: none"> <li>1. Assess baseline vital signs and baseline electrocardiogram (ECG) rhythm a minimum of every 5 minutes post-rate changes/ bolus administration, then every 10 minutes until desired heart rate is achieved, then a minimum of every 2 hours.</li> <li>2. Determine concentration and verify correct dose upon initiation, within 1 hour of assuming care of the patient and with every rate change.</li> <li>3. Assess for the following adverse reactions/side effects a minimum of every 2 hours: <ul style="list-style-type: none"> <li>• Hypotension</li> <li>• ECG - for changes in atrial-ventricular (AV) nodal conduction, e.g., AV blocks</li> <li>• Signs of congestive heart failure (CHF) (especially with prolonged infusions): shortness of breath, crackles, jugular venous distension</li> </ul> </li> </ol>
<b>ADMINISTRATION:</b>	<ol style="list-style-type: none"> <li>4. Administer Diltiazem as ordered. Order to include titration parameters desired ventricular rate, and blood pressure. Usual dose: <ul style="list-style-type: none"> <li>• Initial dose is 0.25 mg/kg body weight as a bolus over 2 minutes (Average adult dose is 20 mg) (Note: boluses should be undiluted)</li> <li>• If adequate therapeutic effect not achieved after 15 minutes repeat 0.35 mg/kg as a bolus over 2 minutes (Average adult dose 25 mg)</li> <li>• If therapeutic effect achieved by first or second bolus, immediately follow with infusion of 5-15 mg/hour and titrate to maintain desired HR and BP.</li> </ul> </li> </ol>
<b>DISCONTINUATION:</b>	<ol style="list-style-type: none"> <li>5. Discontinue diltiazem as ordered - usually within one hour after transitioning to an oral agent.</li> </ol>
<b>REPORTABLE CONDITIONS:</b>	<ol style="list-style-type: none"> <li>6. Notify physician for: <ul style="list-style-type: none"> <li>• Hypotension, dizziness</li> <li>• Bradycardia, second or third degree AV block</li> <li>• Signs and symptoms of CHF</li> <li>• Inability to achieve desired parameters</li> </ul> </li> </ol>
<b>PATIENT/FAMILY TEACHING:</b>	<ol style="list-style-type: none"> <li>7. Instruct on the following: <ul style="list-style-type: none"> <li>• Purpose of diltiazem</li> <li>• Need for frequent monitoring</li> <li>• Notification of RN for dizziness</li> </ul> </li> </ol>

ADDITIONAL  
PROTOCOLS:

8. Implement the following as indicated:
  - Intravenous Therapy
  - Arterial Line-ICU
  - Oxygen Therapy

DOCUMENTA-  
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9. Document in accordance with documentation standards.

Initial date approved: 11/94	Reviewed and approved by: Critical Care Committee Professional Practice Committee Pharmacy & Therapeutic Committee Nurse Executive Council Attending Staff Association Executive Committee	Revision Date: 10/00, 03/05, 03/14, 07/17
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