

SCOPE: ALS, CCT,	
<b>MEDICATION:</b>	<b>ADENOSINE (Adenocard)</b>
<b>INTERVENTION:</b>	<p><u>Classification:</u> Antiarrhythmic agent</p> <p><u>Actions:</u> Slows conduction time through the AV node, interrupting the re-entry pathways through the AV node, restoring normal sinus rhythm</p> <p><u>Contraindications:</u></p> <ul style="list-style-type: none"> <li>• Hypersensitivity to adenosine</li> <li>• Second- or third-degree AV block</li> <li>• Sick sinus syndrome</li> <li>• Symptomatic bradycardia</li> <li>• Asthma</li> </ul> <p><u>Precautions:</u></p> <ul style="list-style-type: none"> <li>• Decreases conduction through the AV node and may produce first-, second-, or third-degree heart block</li> <li>• Patients with preexisting SA nodal dysfunction may experience prolonged sinus pauses after adenosine</li> <li>• Use caution in patients with first-degree AV block or bundle branch block</li> <li>• Monitor for proarrhythmic effects (eg, polymorphic ventricular tachycardia) during and shortly after administration/termination of arrhythmia</li> <li>• Avoid use in irregular or polymorphic wide-complex tachycardias; may cause degeneration to ventricular fibrillation</li> <li>• Use with extreme caution in heart transplant recipients; adenosine may cause prolonged asystole; reduction of initial adenosine dose is recommended</li> <li>• Avoid use in patients with bronchoconstriction or bronchospasm (eg, asthma); dyspnea, bronchoconstriction, and respiratory compromise have occurred during use</li> <li>• Should not be used in patients with WPW syndrome and pre-excited atrial fibrillation/flutter since ventricular fibrillation may result</li> </ul> <p><u>Dosage:</u></p> <p>I. <u>PSVT, Narrow &amp; Wide-Complex Tachycardia:</u></p> <p style="margin-left: 20px;">a. Adult:</p> <p style="margin-left: 40px;">i. IV/IO: 6 mg rapid IVP; if not effective within 1 to 2 minutes then</p> <p style="margin-left: 60px;">1. May repeat 12 mg rapid IVP x1</p> <p style="margin-left: 20px;">b. Pediatric:</p> <p style="margin-left: 40px;">i. IV/IO: 0.1 mg/kg rapid IVP(max dose 6 mg); if not effective within 1 to 2 minutes then:</p> <p style="margin-left: 60px;">1. May repeat 0.2 mg/kg rapid IVP (max dose 12 mg) x1</p> <p><u>Onset of Action:</u> Rapid</p> <p><u>Duration:</u> Very brief</p> <p><u>Adverse Effects:</u> Dyspnea, bronchoconstriction, respiratory compromise, hypotension, heart block</p>

If this is a patient care policy, the information contained herein is used to provide guidance in the care of patients, but should not, and does not replace or preclude the use of clinical judgment.

<i>FOR OFFICE USE ONLY</i>	
Originator:	Original Date:
Revised Date:	
Effective Date:	06/01/18

	<p><u>Special Considerations:</u></p> <ol style="list-style-type: none"><li>I. Administer as a rapid bolus as close to the patient as possible with an immediate NS 20 ml (adult) &gt;5 ml (ped) rapid flush</li><li>II. Initial dose of adenosine should be reduced to 3 mg if patient is currently receiving carbamazepine or dipyridamole, has a transplanted heart or if adenosine is administered via central line</li><li>III. While adenosine will not convert atrial fibrillation or atrial flutter, the transient AV-nodal block may aid in the identification of the arrhythmia by exposing the underlying atrial fibrillation or flutter electrocardiographic morphology</li></ol>
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