Adenosine (Adenocard)

Effective: 03/01/2021
Supersedes: N/A

Approved Provider: Paramedic **Reference Protocols:** Dysrhythmia

DOSING AND ADMINISTRATION	
ADULT	**PEDIATRIC (Refer to Handtevy)**
• 6mg repeat at 12 mg in 1-2 min. 3rd dose of 12 in 1-2 min IV/IO (AC preferred)	• 0.1mg/kg (6mg max) repeat at 0.2mg/kg IV/IO (12mg max) (AC preferred)

Pharmacology and Actions:

- Slows conduction through the AV node, disrupting AV nodal reentry
- Half-life is less than 10 seconds due to cellular uptake and metabolism

Indications:

- Regular rhythm narrow complex tachycardia >150 BPM in adults or > 220 BBM in pediatrics
- Adenosine may be indicated while setting up to sedate and cardiovert the patient

Contraindications:

- Patient with allergy to adenosine
- Poison induced tachycardias, e.g. Cocaine
- History of Wolf-Parkinson White Syndrome
- Sick-sinus syndrome
- 2nd and 3rd degree AV heart block

Precautions:

- May produce transient first, second or third degree AV blocks or asystole
- May cause bronchospasms in asthma patients
- Effects are potentiated by dipyridamole (Persantine) and carbamazepine (Tegretol)
- Is not effective in:
    - Sinus Tachycardia
    - Atrial Fibrillation /Atrial Flutter
    - Ventricular Tachycardia
    - If the cardiac rate is less than the designated criteria rate, consider other etiologies and contact medical control to discuss etiology and treatment

Administration:

- Establish vascular access as close to the core as is practical, preferred location antecubital or humeral head IO
- Short ½ life (<10 seconds). Administer by rapid IV bolus at injection port closest to patient and follow by a saline flush
- Only acceptable routes of administration are IV/IO

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Side Effects:

- Frequent, transient side effects include:
  - Facial flushing
  - Dyspnea/ Chest pressure
  - Nausea
  - Headache/Light headedness