Jackson Hole Fire/EMS Operations Manual

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Title: **Medication Protocol: Adenosine**
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ADENOSINE (Adenocard)
(Medication Protocol)

EMT-INTERMEDIATE PROVIDERS

NOT AUTHORIZED

PARAMEDIC PROVIDERS

STANDING ORDER

CLASS:	Antidysrhythmic, endogenous nucleoside
PHARMACOLOGY/ ACTIONS:	Adenosine primarily is formed from the breakdown of adenosine triphosphate which is found in every cell of the body and has a wide range of metabolic roles. Adenosine slows SVT by ↓ electrical conduction through the AV node without causing negative inotropic effects. It also acts directly on sinus pacemaker cells and vagal nerve terminals to decrease chronotropic activity.
ONSET/DURATION:	Onset: 20 – 30 seconds Duration: 30 seconds
USE IN FIELD/ INDICATIONS:	- Regular narrow-complex PSVT - Regular wide-complex undifferentiated tachycardia - if Ventricular-Tachycardia the med will likely have no effect. - Dysrhythmias associated with bypass tracts such as WPW syndrome.
CONTRAINDICATIONS:	Second- or third-degree heart block, sick sinus syndrome, known hypersensitivity
SIDE EFFECTS:	Facial flushing, headache, SOB, dizziness, and nausea.
DRUG INTERACTIONS:	Methylxanthines (e.g., aminophylline, theophylline) may decrease the effectiveness, thus requiring larger doses. Dipyridamole (Persantine) can potentiate the effects, thus dosage may need to be reduced.
ROUTE:	Rapid IV push

ADULT	PEDIATRIC (<45 kg)
Initial dose: 6 mg over 1 second period, followed by 20 ml flush; elevate extremity. Additional 12 mg in 1 – 2 minutes if PSVT continues.	Initial dose: 0.1 mg/kg; may be doubled once (max first dose: 6 mg); rapid IV bolus, followed by 5-mL saline flush

PREGNANCY SAFETY: Category C – – give only if potential benefits justifies risk to fetus

COMMENTS: Due to extremely short half-life, adenosine must be administered rapid IV push, preferable via large bore IV closest to central circulation as possible (i.e., AC, EJ).