

PALS Medications for Cardiac Arrest and Symptomatic Arrhythmias

DRUG	DOSAGE (PEDIATRIC)	REMARKS
Adenosine	0.1 mg/kg IV/IO; (max single dose 6 mg) Second dose: 0.2 mg/kg; (maximum single dose: 12 mg)	Rapid IV/IO bolus Rapid Flush to central circulation Monitor ECG during dose.
Amiodarone for pulseless VF/VT Amiodarone for perfusing SVT' or VT	5 mg/kg IV/IO; (can repeat 5mg/kg bolus to a total 15mg/kg per 24 hr.) Maximum single dose 300 mg Loading dose: 5 mg/kg IV/IO Maximum total dose: 15 mg/kg per day	Rapid IV bolus IV over 20 to 60 minutes Routine use in combination with drugs prolonging QT intervals is not recommended. Hypotension is most frequent side effect.
Atropine sulfate*	0.02 mg/kg IV/IO; (minimum dose: 0.1 mg) Maximum single dose: -Child: 0.5 mg -Adolescent: 1.0 mg Maximum total dose: -Child: 1.0 mg -Adolescent: 3 mg	May give IV, IO or ET. Tachycardia and pupil dilation may occur but <i>not</i> fixed dilated pupils.
Calcium chloride 10%=100 mg/mL (27.2 mg/mL elemental Ca)	20 mg/kg (0.2 mL/kg) IV/IO	Give slow IV push for hypocalcemia, hypermagnesemia, calcium channel blocker toxicity, preferably via central vein, Monitor heart rate; bradycardia may occur.
Calcium Gluconate 10%=100 mg/mL (9 mg/mL elemental Ca)	60-100 mg/kg (0.6-1.0 mL/kg) IV/IO	Give slow IV push to hypocalcemia, hypermagnesemia, calcium channel blocker toxicity, preferably via central vein.
Epinephrine* Symptomatic bradycardia Cardiac arrest	IV/IO: 0.01 mg/kg (1:10,000) or 0.1 mL/kg (1:10,000)	Tachyarrhythmia's, hypertension may occur. Repeat standard dose q 3-5 min with IV/IO. May administer high dose via ET tube until IV/IO established. Then begin with first IV dose.
	ET: 0.1 mg/kg (1:10,000) or 0.1 mL/kg (1:1,000)	
	Administer epinephrine every 3 to 5 minutes in arrest	
Glucose (10% or 25% or 50%)	IV/IO: 0.5-1.0 g/kg • 1-2 mL/kg 50% • 2-4 mL/kg 25% • 5-10 mL/kg 10%	For suspected hypoglycemia; avoid hyperglycemia.
Lidocaine* Lidocaine infusion (start after a bolus)	IV/IO/ET: 1 mg/kg IV/IO: 20-50 µg/kg per minute	Rapid bolus Consider a second bolus of 0.5-1.0 mg/kg if maintenance infusion is delayed >15 minutes.
Magnesium Sulfate (500 mg/mL)	Torsades de Point (pulseless) IV/IO: 25-50 mg/kg bolus (maximum dose: 2 g)	10 to 20 minute IV infusion for torsades de point (with pulse) or 15 to 30 minute slow infusion suspected hypomagnesemia, status asthmaticus.
Procainamide for perfusing tachycardia's (100 mg/mL and 500 mg/mL) Pronestyl	Loading dose: 15 mg/kg IV/IO	Infusion over 30 to 60 minutes; routine use in combination with drugs prolonging QT interval is not recommended.
Sodium bicarbonate (1 mEq/mL and 0.5 mEq/mL)	IV/IO: 1 mEq/kg per dose	Infuse slowly and only if ventilation is adequate.

IV = intravenous

IO = Intraosseous

ET = endotracheal

*For endotracheal administration use higher dose (2 to 10 time the IV dose); dilute medication with normal saline to a volume of 3 to 5 mL and follow with several positive-pressure ventilations.