

Pediatric Post Resuscitation

History






- Respiratory arrest
- Cardiac arrest

Signs/Symptoms

- Return of pulse

Differential

- Continue to address specific differentials associated with the original dysrhythmia

	 Pediatric Airway Protocol(s) AR 5 - 7 as needed
	Monitor Vital Signs / Reassess
	Blood Glucose Analysis Procedure
B	Optimize Ventilation and Oxygenation <ul style="list-style-type: none">• Maintain SpO2 ≥ 90%• Preferably SpO2 ≥ 94%• Advanced airway if indicated• ETCO2 ideally 35 – 45 mm Hg• Respiratory Rate 8 – 10• Remove Impedance Threshold Device DO NOT HYPERVENTILATE
B	12 Lead ECG Procedure
A	IV / IO Procedure
P	Cardiac Monitor
	Pediatric Diabetic Protocol PM 2 if indicated
	Pediatric Hypotension / Shock Protocol PM 3 if indicated
	Pediatric Bradycardia Protocol PC 2 if indicated
	Pediatric Tachycardia Protocol PC 5 if indicated

Hypotension Age Based

0 – 31 Days
< 60 mmHg

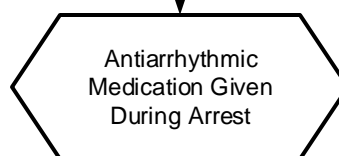
1 Month to 1 Year
< 70 mmHg

> than 1 Year
< 70 + (2 x age) mmHg

Arrhythmias are common
and usually self limiting
after ROSC




If Arrhythmia Persists
follow Rhythm
Appropriate Protocol





YES

NO

	Continue Antiarrhythmic Utilized Refer to Appropriate Pediatric Arrhythmia Protocol
P	

	Post-intubation / BIAD Management Protocol AR 8
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	Notify Destination or Contact Medical Control	
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Pediatric Post Resuscitation

Pearls

- **Recommended Exam: Mental Status, Neck, Skin, Lungs, Heart, Abdomen, Extremities, Neuro**
- **Goals of care are to preserve neurologic function, prevent secondary organ damage, treat the underlying cause of illness, and optimize prehospital care. Frequent reassessment is necessary.**
- **Hyperventilation is a significant cause of hypotension / recurrence of cardiac arrest in post resuscitation phase and must be avoided.**
- **Target oxygenation to $\geq 94\%$. 100% FiO_2 is not necessary, titrate oxygen accordingly.**
- **EtCO_2 should be continually monitored with advanced airway in place.**
- **Administer resuscitation fluids and vasopressor agents to maintain SBP at targets listed on page 1. This table represents minimal SBP targets.**
- **Targeted Temperature Management is recommended in pediatrics, but prehospital use is not associated with improved outcomes. Transport to facility capable of intensive pediatric care.**
- **Antiarrhythmic agents:**
 - Adenosine: First dose: 0.1 mg / kg (Maximum 6 mg) Second dose: 0.2 mg / kg (Maximum 12 mg)
 - Amiodarone $5 \text{ mg / kg IV / IO}$ (single dose Maximum 300 mg). May repeat x 2 to a Maximum of 15 mg / kg .
 - Lidocaine $1 \text{ mg / kg IV / IO}$. Infusion $20 - 50 \text{ mcg / kg / min}$. If infusion is initiated > 15 minutes from first bolus, repeat $0.5 \text{ mg / kg bolus}$.
 - Magnesium Sulfate $40 \text{ mg / kg IV / IO}$ over $10 - 20$ minutes. In Torsades de pointes give over $1 - 2$ minutes. Maximum 2 g .
 - Procainamide $15 \text{ mg / kg IV / IO}$ over $30 - 60$ minutes. Monitor for increased QRS and increased QT.
- **Vasopressor agents:**
 - Dopamine $2 - 20 \text{ mcg / kg / min IV / IO}$
 - Epinephrine $0.1 - 1 \text{ mcg / kg / min IV / IO}$
 - Norepinephrine $0.1 - 2 \text{ mcg / kg / min IV / IO}$
 - Dose Calculation: $\text{mL / hour} = \text{kg} \times \text{dose}(\text{mcg / kg / min}) \times 60 (\text{min / hr}) / \text{concentration}(\text{mcg / mL})$
- If pediatric weight is known, use in drug and fluid calculations. Use actual body weight for calculating initial medication dosages. If unknown then use a body length tape system.
- Appropriate post-resuscitation management may best be planned in consultation with medical control.