Pediatric Symptomatic Tachycardia

FIELD TREATMENT GUIDELINE P-07

INDICATION

- Symptomatic Tachycardia with cardiopulmonary compromise:
  - Hypotension.
  - Acutely altered mental status.
  - Signs of shock.

BLS

- Follow **General Pediatric Care P-01**.
- **12-Lead ECG BP-03**.

ALS

PROBABLE SINUS TACHYCARDIA:

- Identification:
  - Compatible history consistent with known cause, P waves present/normal, variable R-R intervals, and constant PR intervals.
  - Children: heartrate usually < 180/min,
  - Infants: heartrate usually < 220/min
- Treatment: Search for and treat causes, e.g., fever, dehydration, shock.

PROBABLE SUPRAVENTRICULAR TACHYCARDIA:

- Identification:
  - Compatible history (vague, nonspecific); history of abrupt rate changes, P waves absent/abnormal, and heartrate not variable.
  - Children: heartrate usually ≥ 180/min
  - Infants: heartrate usually ≥ 220/min
- Treatment:
  - Initiate vagal maneuver
  - **Adenosine**: 1st Dose: *Pediatric*: IV/IO;
    Administer according to PediaTape weight calculation and **Pediatric Medication Reference Cards**.

    2nd Dose: *Pediatric*: IV/IO;
    Administer after 3 minutes according to PediaTape weight calculation and **Pediatric Medication Reference Cards**.
  - If no IV/IO access or if Adenosine is ineffective:
  - **Synchronized Cardioversion**: *Pediatric*: Administer according to PediaTape weight calculation and **Pediatric Medication Reference Cards**.
    - Consider **Sedation AP-14** if patient is awake and aware.

ALS CONT.	**PROBABLE VENTRICULAR TACHYCARDIA:**
	• Identification: Wide QRS duration (>0.09 sec)
	• Treatment: Signs of poor perfusion, no base hospital contact required:
	  • **Synchronized Cardioversion**: *Pediatric*: Administer according to PediaTape weight calculation and **Pediatric Medication Reference Cards**.
	    • Consider **Sedation AP-14** if patient is awake and aware.
	  • With signs of good perfusion, contact base hospital for consideration of:
	  • **Adenosine**: 1st Dose: *Pediatric*: IV/IO; Administer according to PediaTape weight calculation and **Pediatric Medication Reference Cards**.
	    2nd Dose: *Pediatric*: IV/IO; Administer after 3 minutes according to PediaTape weight calculation and **Pediatric Medication Reference Cards**.
	• **BASE HOSPITAL ORDERS**
	  • **Amiodarone**: *Pediatric*: IV/IO; Administer according to PediaTape weight calculation and **Pediatric Medication Reference Cards**.

KEY CONCEPTS	• EMS personnel should initiate rapid transport. • Rhythm analysis should be based on review of printed ECG strip, not monitor screen or computerized readout of 12-lead ECG. • Caution with administration of amiodarone. Rapid infusion may cause hypotension, • Amiodarone should not be used in unstable patients. This includes hypotensive patients. • Amiodarone should not be administered to patients experiencing ventricular ectopy. Use of amiodarone should be restricted to ventricular tachycardia.