

PC04 Pediatric Tachycardia – Narrow Complex

Objectives:

- Early recognition and management of pediatric narrow-complex tachycardia

General Information:

- A key component to treatment of pediatric tachycardia is distinguishing between sinus tachycardia and SVT
 - a) Sinus tachycardia:
 - i) HR < 180 in children, 220 in infants
 - ii) Rate variable with stress or activity
 - iii) P waves may be visible
 - iv) Gradual onset
 - v) Signs of underlying cause (ie fever, dehydration, hemorrhage, pain)
 - b) Supraventricular tachycardia
 - i) HR > 180 in children, 220 in infants
 - ii) Rate not variable
 - iii) P waves absent or inverted
 - iv) Sudden onset
 - v) Infants may present with CHF symptoms
- Signs and Symptoms of a hemodynamically unstable patient include:
 - a) Altered mental status
 - b) Poor perfusion
 - i) Mottling
 - ii) Pallor
 - iii) Cyanosis
 - iv) Diminished peripheral pulses
 - c) Ongoing chest discomfort
 - d) Shortness of breath
 - e) Hypotension
 - f) Shock
- Vagal maneuvers
 - a) Apply ice to the forehead, eyes and bridge of nose of infants
 - b) Older children:
 - i) Blow through obstructed straw
 - ii) Bear down as if having a bowel movement
 - iii) Hold breath while ice is applied to forehead, eyes and bridge of nose
- Adenosine:
 - a) First dose: 0.1 mg/kg rapid IV/IO push, max dose 6 mg
 - b) Second dose: 0.2 mg/kg rapid IV/IO push, max dose 12 mg



Warnings/Alerts:

- Do not obstruct infant's airway while performing vagal maneuvers
- Do not use ocular pressure or carotid massage as a vagal maneuver
- If the patient has SVT with altered mental status and other signs of hemodynamic instability, do not delay cardioversion to administer sedation

OMD Notes:

- Younger children may require proportionately higher doses of medication due to their faster metabolism
- Adenosine should be given in the stable patient with physician order only
- Stable patients should receive supportive care and transport to the ED

References:

AHA Pediatric Advanced Life Support Provider Manual, 2006, p. 126-147

Performance Indicators:

Vital Signs before Intervention	Vital Signs after Intervention	Stable or Unstable Patient
Response to Therapy	Initial Rhythm	LOC
Onset of Symptoms		

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