Pediatric Tachycardia

Aliases: Supraventricular tachycardia (SVT), atrial fibrillation (a-fib), atrial flutter, ventricular tachycardia (V-tach)

This protocol is for paramedic use only.

This protocol is intended for symptomatic pediatric patients with elevated heart rate, relative for their age. Refer to MI-MEDIC for appropriate vital signs and medication doses.

I. General Treatment
   A. Manage airway as necessary
   B. Provide supplemental O2 as needed to maintain O2 saturation > 94%
   C. Initiate monitoring and perform 12-lead EKG
   D. Establish vascular access
   E. Identify and treat underlying causes of tachycardia such as dehydration, fever, vomiting, sepsis and pain.
   F. Administer fluid bolus 20cc/kg for patients with likely fluid depletion
   G. Consider the following additional therapies if specific dysrhythmias are recognized:

II. Specific Dysrhythmia Treatment
   A. Regular Narrow Complex Tachycardia – Stable (SVT)
      i. Perform vagal maneuvers
      ii. Administer Adenosine
          1. 0.1 mg/kg (max of 6 mg)
          2. May repeat with 0.2 mg/kg (max of 12 mg)

   B. Regular Narrow Complex Tachycardia – Unstable
      i. Deliver a synchronized shock; 0.5-1 J/kg for the first dose
      ii. Repeat doses should be 2 J/kg

   C. Regular, Wide Complex Tachycardia – Stable
      i. Consider Adenosine 0.1 mg/kg (max of 6 mg) for SVT with aberrancy
      ii. If ventricular in origin, give Lidocaine 1 mg/kg IV (max of 100 mg)

   D. Regular, Wide Complex Tachycardia – Unstable
      i. Synchronized cardioversion 0.5-1.0 J/kg

   E. Unstable, Irregular, Wide Complex Tachycardia –
      i. Defibrillate according to Electrical Therapy Procedure
      ii. Refer to Pediatric General Cardiac Arrest Protocol