



Section: Pediatric Medical  
Subject: CARDIAC DYSRHYTHMIAS –NARROW COMPLEX TACHYCARDIA  
Section #: 343.11  
Issue Date: March 21, 2011  
Revision Date: December 1, 2017  
Approved By: 

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1. Basic ALS Treatments.
2. Adequate perfusion and QRS normal ( $\leq 0.09$  sec)
  - a. Probable sinus tachycardia
    - i. Search for and treat cause
  - b. Probable SVT
    - i. Consider vagal maneuvers
    - ii. **Adenosine**: 0.1 mg/kg (max dose of 6mg); if no response then
    - iii. **Adenosine** dose of 0.2 mg/kg (max dose of 12 mg ) in two (2) minutes if no response then:
    - iv. Obtain 12-lead EKG if not already done.
    - v. **Amiodarone**: 5.0 mg/kg IV/IO over 20-60 minutes
3. Poor perfusion and QRS normal ( $\leq 0.09$  sec):
  - a. If rapid IV access is available:
    - i. **Adenosine**: 0.1 mg/kg (max dose of 6mg); if no response then
    - ii. **Adenosine** dose of 0.2 mg/kg (max dose of 12 mg ) in two (2) minutes if no response then
  - b. If IV access is NOT immediately available:
    - i. Synchronized cardioversion:
      1. First energy level: 0.5 – 1.0 J/kg.
      2. Subsequent energy levels 2.0 J/kg
    - ii. Establish IV/IO once stabilized
    - iii. Analgesia and sedation (for normal to high BP):
      1. **Fentanyl** 1 mcg/kg (max dose of 50 mcg) slow IV once.
      2. **Midazolam** 0.05 mg/kg (max dose of 2.5 mg) IV or IN once.
4. Obtain a 12-lead EKG as soon as the patient is stabilized.
5. QA Points:
  - a. EKG findings consistent with sinus tachycardia:
    - i. QRS normal ( $\leq 0.09$  sec)
    - ii. P waves present and normal
    - iii. Variable R-R with constant PR interval
    - iv. Rate in infants usually < 220/min
    - v. Rate in children usually < 180/min
  - b. EKG findings consistent with SVT
    - i. QRS normal ( $\leq 0.09$  sec)
    - ii. P waves absent or abnormal
    - iii. Rate is not variable with activity
    - iv. Rate in infants usually > 220/min
    - v. Rate in children usually > 180/min
  - c. EKG findings consistent with SVT with QRS aberrancy
    - i. QRS wide ( $> 0.09$  sec)
    - ii. Uniform QRS morphology

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- d. Unstable condition must be related to the tachycardia.
  - i. Signs and symptoms may include chest pain, shortness of breath, decreased level of consciousness, low blood pressure, shock, pulmonary congestion, CHF, or acute MI.
- e. Immediate cardioversion is seldom needed for heart rates < 150 bpm.
- f. If delays in synchronization occur and clinical conditions are critical, switch to immediate unsynchronized cardioversion.