

**SUPRAVENTRICULAR TACHYCARDIA**

**BLS ACTION/TREATMENT:**

**May present as syncope, weakness, chest pain, shortness of breath, light-headedness.**

- Stabilize:
  1. ABCs.
  2. Administer oxygen.
- Assessment:
  1. Vital signs (BP, pulse rate, respiratory rate).
  2. Document presence or absence of the patient being pale, sweaty, diaphoretic or short of breath.
  3. Document if the patient is having chest pain or pressure.
- History:
  1. Document if the patient used any of their own medications immediately prior to or during BLS arrival.

**ALS ACTION/TREATMENT:**

- Monitor and document cardiac rhythm with rhythm strip.
- Pulse oximetry.
- IV access.
- Treatment options for patients with chest discomfort, lightheadedness, and diaphoresis:
  - Valsalva's maneuver.
  - If history of SVT with monitor now showing narrow QRS regular heart rate  $\geq 160$  bpm and history of prior positive response to Adenosine:

Adenosine: 6 mg, rapid IVP over 1–3 seconds.  
May repeat single dose of 12 mg rapid IVP if rhythm persists, in 1–2 minutes.  
(If patient reports positive prior response only to adenosine 12 mg dose, may skip 6 mg dose and administer adenosine 12 mg once.)
  - No known history of SVT, Base Hospital contact and consider:

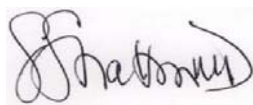
Adenosine: 6 or 12 mg, rapid IVP over 1– 3 seconds.  
May repeat in 1–2 minutes.
- Treatment options for patients with cardiac chest pain, altered mental status or poor perfusion:
  - Synchronized cardioversion:

Biphasic: 100J initial shock; maximum energy subsequent shock; or  
Manufacturer's recommendations for a specific monitor-defibrillator.
  - Premedicate: Midazolam 4 mg slow IVP/IO (over 1 minute) for patients  $\leq 60$  years old.  
Midazolam 2 mg slow IVP/IO (over 1 minute) for patients  $\geq 61$  years old.  
Prepare to assist ventilation if respiratory depression develops.

Boxed text indicates BH order

Unboxed text indicates standing order

Approved:



TxGuide:Cardiac: C-25  
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**Pediatric:** (use Length Based Resuscitation Tape to determine child's weight)

- Treatment option for patients with palpitations, lightheadedness, and possible history of SVT (Caution: younger children may appear to be in SVT as a response to fever):
  - Valsalva's maneuver.
  - IV access.
  - Consider fluid bolus (20mL/kg) if signs of dehydration; may repeat twice.

– Adenosine: 0.1 or 0.2 mg/kg rapid IVP over 1-3 seconds to maximum 6 mg.  
May repeat in 1-2 minutes.  
Maximum single dose 12 mg.

- Treatment option for children with signs and/or symptoms of cardiac ischemia, altered mental status or poor perfusion:

– Synchronized cardioversion:  
Biphasic:  
Initial shock: 1 J/kg.  
Subsequent shocks: 2 J/kg.

- Premedicate: Midazolam 1 mg slow IVP over 1 minute in children  $\geq$  13 months old.

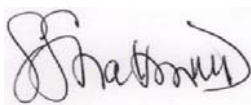
**NOTES:**

- A rhythm strip should be run continuously during treatment attempts (synchronized cardioversion or medication administration).
- Unstable patients, especially those with altered mental status, may require immediate cardioversion without premedication.
- Unstable patients may require unsynchronized cardioversion (defibrillation) if "synch" does not occur.
- Adenosine should be used cautiously in patients with history of asthma or wheezing. Adenosine should not be given to patients with history of severe asthma.
- Pediatric Information:
  - Sinus tachycardia (as opposed to SVT) may be as fast as 220/min, especially in infants. A Valsalva maneuver may be attempted in older children who can understand and cooperate.
  - Do not use midazolam in infants (birth – 12 months) because it can cause hypotension and cardiac arrest.

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