

TACHYCARDIA (With a Pulse)

UPDATED 1/2024

ALL PROVIDERS

- Focused history and physical exam
 - Assess blood glucose level
- Continuous ECG, ETCo2, blood pressure, and pulse oximetry monitoring
- Acquire and transmit a 12 lead EKG if possible.
 - Ensure to capture/print 4- or 12-lead EKG prior to, during, and after any maneuver or medication administration to evaluate its effectiveness.
- Key Considerations**
 - Pregnancy >20 weeks gestation - Place wedge-shaped cushion or multiple pillows under patient's right hip.
 - Pediatric lowest acceptable systolic blood pressures are:
 - birth to 1 month = 60mmHg
 - 1 month to 1 year = 70mmHg
 - 1 year to 10 years = 70mmHg + (age x 2)
 - 10 years and older = 90mmHg.

ADULT

PEDIATRIC (<15 years of Age)
NOTE: Pediatric weight based dosing should not exceed Adult dosing.

AEMT

- Vascular access and fluid therapy
- Supraventricular Tachycardia (SVT)**
- Obtain a 12 Lead EKG, if possible
- Maneuvers to increase vagal tone: Valsalva, ice pack to face, Trendelenburg, urination, etc.)

AEMT

- Vascular access and fluid therapy
- Supraventricular Tachycardia (SVT)**
- Infants: rate usually greater than 220 bpm with no variation
- Children: rate usually greater than 180 bpm with no variation
- Obtain a 12 Lead EKG is possible, if possible
- Maneuvers to increase vagal tone: Valsalva, ice pack to face, Trendelenburg, urination, etc.)

PARAMEDIC

PARAMEDIC

Supraventricular Tachycardia (SVT)

- ❑ Adenosine
 - Initial dose: 6 mg IV followed immediately by a 20cc NS or LR rapid push
 - May repeat once: 12mg IV followed immediately by a 20cc NS or LR rapid push

Stable Wide Complex (QRS > 120 msec) Tachycardia

- ❑ Transport to ED with IV in place and careful monitoring

Unstable Tachycardia – Synchronized Cardioversion

Signs/Symptoms of Unstable Tachycardia

- Acute cardiac chest pain
- Acute congestive heart failure / pulmonary edema
- Altered mental status
- SBP <90 mm Hg
- Cool, Clammy or Pale skin
- Weak or Thready pulse

Supraventricular Tachycardia (SVT)

- ❑ Adenosine
 - Indicated for patients with prior known SVT who have responded to adenosine previously
 - Initial dose: 0.1mg/kg IV (to max 6mg) followed immediately by a 10cc NS or LR rapid push
 - May repeat once: 0.2mg/kg IV (to max 12mg) followed immediately by a 10cc NS or LR rapid push

Stable Wide Complex (QRS > 120 msec) Tachycardia

- ❑ Transport to ED with IV in place and careful monitoring

Unstable Tachycardia – Synchronized Cardioversion

Signs/Symptoms of Unstable Tachycardia

- Acute congestive heart failure / pulmonary edema
- Altered mental status
- Low BP for age
- Cool, Clammy, or Pale skin
- Weak or Thready pulse

Synchronized Cardioversion

- Initial dose: 100J
- Repeat doses: 200J
- Consider pretreating with a benzodiazepine and analgesic **ONCE** but do not delay cardioversion
 - Fentanyl - 50-100mcg
 - Lorazepam - 1mg

OR

 - Midazolam - 2.5mg

Synchronized Cardioversion

- Initial energy dose is 0.5-1 J/kg
- If no response, double energy dose to 2 J/kg
- Consider pretreating with a benzodiazepine and analgesic **ONCE** but do not delay cardioversion
 - Fentanyl - 1mcg/kg
 - Lorazepam - 0.05mg/kg

OR

 - Midazolam - 0.1mg/kg