

TACHYCARDIA (With a Pulse)

ALL PROVIDERS

- Focused history and physical exam
 - Assess blood glucose level
- Continuous ECG, CO₂, blood pressure, and pulse oximetry monitoring when available
- Acquire and transmit a 12L EKG if possible.
- 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 is = 70mmHg + (age x 2) and over 10 years = 90mmHg.

ADULT

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

AEMT

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- 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.)

- 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

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- Supraventricular Tachycardia (SVT)**
- Adenosine**
 - Indicated for patients with prior SVT who have responded to adenosine previously
 - **Initial dose: 6 mg IV**
 - **May repeat once: 12mg IV**

**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
- Signs of shock:

- 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)**
 - **May repeat once: 0.2mg/kg IV (to max 12mg)**

**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

- ***Indicated for unstable patients***
- These are initial doses:
 - Narrow Regular: 50-100J (mono- or bi-phasic)
 - Narrow Irregular: 120-200J biphasic and 200J monophasic
 - Wide Regular: 100J (mono- or bi-phasic)
 - Wide Irregular: defibrillate without synchronization
- Consider Procedural related anxiety management (refer to the **Pain/Anxiety Management Protocol**)

- Signs of shock:
 - Cool, clammy, or pale skin
 - Weak or thready pulse

Synchronized Cardioversion

- Indicated for unstable patients
- Initial energy dose is 0.5-1 J/kg
- If no response, double energy dose to 2 J/kg
- Consider Procedural related anxiety management (refer to the **Pain/Anxiety Management Protocol**)