

## 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:
  - 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**)

### **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
- 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**)