

Protocol 700-C4-P

Tachycardia with Pulses

Rev: 2/18

**BLS Treatment**

- ❖ Treat life threats. (See Procedure 701 *Life Threats*)
- ❖ Prepare for transport / transfer of care.

**ALS Treatment**

- ❖ Cardiac Monitor: Confirm rate >220 (Infants) or > 180 (Children)
- ❖ Consider 12-lead-ECG. Transmit as needed for treatment guidance.
- ❖ Treatment (see Table 1)
- ❖ Consider and Treat Causes of Tachycardia (see Table 2)
- ❖ Transport/Contact Base Station

**Table 1: Tachycardia Treatment**

	Stable		Unstable
<b>QRS Complex</b>	<ul style="list-style-type: none"> <li>• Narrow (&lt;0.08s)</li> </ul>	<ul style="list-style-type: none"> <li>• Wide (&gt;0.08s)</li> </ul>	<ul style="list-style-type: none"> <li>• Wide (&gt;0.08s)</li> </ul>
<b>Perfusion</b>	<ul style="list-style-type: none"> <li>• Adequate</li> <li>• Conscious</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate</li> <li>• Conscious</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate</li> <li>• Diminished LOC</li> </ul>
<b>Treatment</b>	<ul style="list-style-type: none"> <li>• Vagal maneuvers</li> <li>• Consider <b>Adenosine</b> <ul style="list-style-type: none"> <li>○ 1st dose: <b>Adenosine</b> rapid 0.1mg/kg IV/IO (max 6 mg); if no change after 1-2 min.</li> <li>○ 2nd dose: <b>Adenosine</b> rapid 0.2mg/kg IV/IO (max 12 mg); if no change after 1-2 min.</li> <li>○ <b>Warning:</b> Do not use if rhythm is irregular, polymorphic or evidence of WPW (see fig 1)</li> </ul> </li> <li>• Synch. cardioversion (see Unstable, Wide)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Normal Saline</b> bolus 20ml/kg</li> <li>• Vagal maneuvers</li> <li>• <b>Lidocaine</b> 1 mg/kg IVP. <ul style="list-style-type: none"> <li>○ May repeat once at 0.5-1 mg/kg IVP.</li> <li>○ If still no improvement, consider</li> </ul> </li> <li>• Sync. cardioversion (see Unstable, Wide)</li> </ul>	<ul style="list-style-type: none"> <li>• Synchronized cardioversion <ul style="list-style-type: none"> <li>○ <b>Midazolam</b> 0.05-0.1 mg/kg IV/IO (max 5 mg)</li> <li>○ 0.5-1.0 J/kg;</li> <li>○ if no change 2 J/kg</li> <li>○ Repeat prn</li> </ul> </li> </ul>

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**Special Considerations**

- ❖ Consider and treat possible causes of tachycardia. See Table 2
- ❖ SVT usually occurs in younger patients with HRs greater than 200 bpm.
- ❖ Typical heart rates for PSVT in infants and children:
  - Infants: 220 to 300/min.
  - Children 1-5 years: 200/min.
  - Children 5-10 years: 180 to 200/min.

Table 2: Possible Causes of Tachycardia	
• Hypoxemia	• Tamponade
• Hypothermia	• Tension pneumothorax
• Hypovolemia	• Thrombosis
• Metabolic disorders	• Pain
• Toxins/poisons/drugs	• Sepsis

- ❖ Confirm a wide complex tachycardia (QRS >0.08 sec) using multiple leads.
- ❖ **Warning:** Avoid **adenosine** in wide complex tachycardia or in suspected WPW (Figure 1)
- ❖ Consult the Base Station if you are unclear about the cause of the dysrhythmia, and whether or not you should treat it.
- ❖ Whenever possible, contact Base Station prior to administering synchronized cardioversion in unstable but conscious patients.
- ❖ In the unstable, unconscious patient where rapid synchronized cardioversion is the highest priority, do not hesitate administering cardioversion before initiating transport and contacting the Base Station.

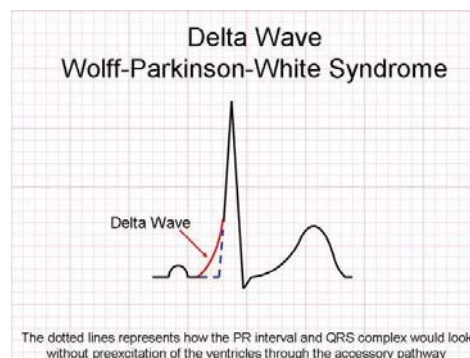


Figure 1