



Protocol 700-C4-P: Tachycardia with Pulses

Revision 5/22/18
Effective 8/1/18

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



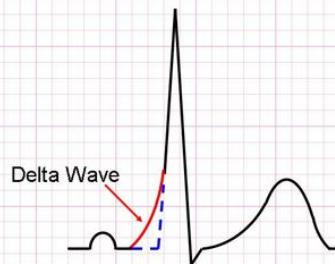
Special Considerations

- ❖ 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.
- ❖ 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 if 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.

❖ **Table 2: Possible Causes of Tachycardia**

- ❖ Hypoxemia
- ❖ Hypothermia
- ❖ Hypovolemia
- ❖ Metabolic disorders
- ❖ Toxins/poisons/drugs
- ❖ Tamponade
- ❖ Tension pneumothorax
- ❖ Thrombosis
- ❖ Pain
- ❖ Sepsis

Delta Wave Wolff-Parkinson-White Syndrome



The dotted lines represents how the PR interval and QRS complex would look without preexcitation of the ventricles through the accessory pathway.