

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
QRS Complex	<ul style="list-style-type: none"> • Narrow (<0.08s) 	<ul style="list-style-type: none"> • 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"> • 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) 	<ul style="list-style-type: none"> • 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

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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.

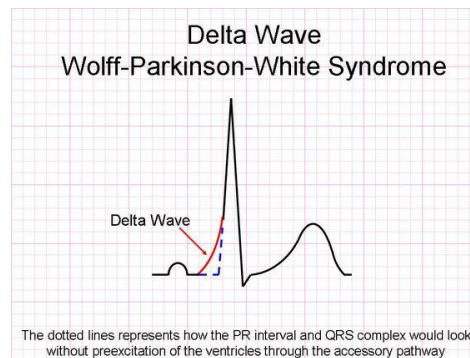


Figure 1