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	• Narrow (<0.08s)	• Wide (>0.08s)	• Wide (>0.08s)
Perfusion	• Adequate • Conscious	• Adequate • Conscious	• Inadequate • Diminished LOC
Treatment	• Vagal maneuvers • Consider **Adenosine** ○ 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)	• **Normal saline** bolus 20ml/kg • Vagal maneuvers • **Lidocaine** 1 mg/kg IVP. ○ May repeat once at 0.5-1 mg/kg IVP. ○ If still no improvement, consider • Sync. cardioversion (see Unstable, Wide)	• Synchronized cardioversion ○ **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	Tamponade
Hypothermia	Tension pneumothorax
Hypovolemia	Thrombosis
Metabolic disorders	Pain
Toxins/poisons/drugs	Sepsis