Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-4
Tachycardia With Pulses	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 01/2027

- **Unstable pts with persistent tachycardia require immediate cardioversion.**
- **It is unlikely that symptoms of instability are caused primarily by the tachycardia if the HR is <150/min.**

BLS

- Manage airway & assist ventilations as necessary
- Assess V/S, including SpO_2 - reassess V/S every 3 - 5 min if possible
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%), short of breath, or signs of heart failure/shock

ALS

- Cardiac monitor, 12-lead ECG at appropriate time (do not delay therapy)
- IV/IO NS at appropriate time (may bolus up to 1000 mL for hypotension)

Persistent tachycardia causing any of the following?
- Hypotension
- Acutely altered mental status
- Signs of shock
- Ischemic chest discomfort
- Acute heart failure

YES

Synchronized Cardioversion
- Initial synchronized cardioversion doses:
  - Narrow regular: 50 - 100 J
  - Narrow irregular: 120 - 200 J
  - Wide regular: 100 J
- Consider pre-cardioversion sedation/pain control*
- If no response to initial shock, increase dose in a stepwise fashion for subsequent attempts
- If rhythm is wide-irregular or monitor will not synchronize, & pt is critical, treat as VF with unsynchronized defibrillation doses (protocol C-1)

NO

Does cardiac rhythm meet any of the following criteria?
- Wide QRS (≥0.12 seconds)
- Atrial Fibrillation
- Atrial Flutter
- Sinus Tachycardia

NO

Valsalva Maneuver

If no response to Valsalva Maneuver, consider:

Adenosine
- First dose: 6 mg rapid IV/IO push
- Second dose (if rhythm does not convert within 1 - 2 mins): 12 mg rapid IV/IO push
- Flush IV/IO line with 20 mL NS after each dose

YES

- Monitor & reassess
- Contact base/modified base hospital for consultation if necessary

***Pre-Cardioversion Sedation/Pain Control**
- Consider one of the following for pts in need of sedation/pain control:
  - **Midazolam:** 2 - 5 mg IV/IO
  - **OR**
  - **Fentanyl:** 25 - 50 mcg IV/IO

**** For pts ≥65yo Midazolam dosing is limited to 2mg. Fentanyl dosing is limited to 25mcg.**