Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-4 (LALS)
Tachycardia With Pulses	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

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

BLS

- Manage airway and 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

LALS

- Cardiac monitor **(AEMT II)**, 12-lead ECG **(AEMT II)** 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

NO →
- Monitor & reassess
- Contact base/ modified base hospital for consultation if necessary

YES

Synchronized Cardioversion (AEMT II)

- 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)

Pre-Cardioversion Sedation/ Pain Control (AEMT II)

- Consider one of the following for pts in need of sedation/pain control:
  - **Midazolam:** 2.5 - 5 mg IV/IO; **OR**
  - **Fentanyl:** 25 - 50 mcg IV/IO
- Continuous $EtCO_2$ monitoring required for pts receiving midazolam or fentanyl

Clinical judgement shall be utilized to determine the appropriate dose of midazolam or fentanyl for pts requiring pre-cardioversion sedation/pain control