

Sierra – Sacramento Valley EMS Agency Treatment Protocol

C-6 (LALS)

Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)

Approval: Troy M. Falck, MD – Medical Director Effective: 06/01/2022

Approval: Victoria Pinette – Executive Director Next Review: 05/2025

- Common symptoms associated with ACS include, but are not limited to:
 - Dyspnea/SOB
- Palpitations
- Diaphoresis
- Nausea/vomiting

- Lightheadedness/near-syncope/syncope
- Upper abdominal pain or heartburn unrelated to meals
- Discomfort in the throat or abdomen may occur in pts with diabetes, women and elderly pts
- Fleeting or sharp chest pain that increases with inspiration & lying supine is unlikely to be ACS related.
- Pt assessment, treatment & transport destination determination should occur concurrently.



- Assess V/S, including SpO₂
- O₂ at appropriate rate if hypoxemic (SpO₂ <94%), short of breath, or signs of heart failure or shock
- P-Q-R-S-T

Aspirin

• 160 - 325 mg chewable PO (anticoagulant use is not a contraindication to administration)



- Cardiac monitor (AEMT II)
- 12-lead EKG as soon as possible (AEMT II) prior to nitroglycerin administration
 - o Criteria for ST Elevation Myocardial Infarction (STEMI):
 - 1. Machine readout: 'Meets ST Elevation MI Criteria', 'Acute MI', 'STEMI' (or equivalent)
 - 2. ST elevation in 2 or more contiguous leads
 - o For pts with suspected ACS, serial 12-lead EKGs should be obtained if the pt's clinical status changes or if EKG changes are noted on the monitor, and every 15 mins if transport times are long
- IV at appropriate time during treatment
 - o Administer 250 mL NS fluid boluses to maintain SBP >90
- o Do not administer fluid if signs of heart failure

If discomfort persists following initial 12-lead acquisition:

Nitroglycerin

- 0.4 mg SL (tablet or spray), repeat every 5 mins if discomfort persists
- Do not administer if SBP <100,
- Use with caution for pts with suspected inferior MI (establish vascular access prior to administration)
- Consult with base/modified base hospital prior to administration if pt takes erectile dysfunction or pulmonary hypertension medication

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ADDITIONAL LALS TREATMENT & PT DESTINATION

If discomfort persists following one or more EMS administered nitroglycerine doses:

Morphine Sulfate (AEMT II)

- 2 mg slow IV
- May repeat every 5 mins if discomfort persists (maximum cumulative dose: 20 mg)
- ① Do not administer morphine to pts with any of the following contraindications:
 - Systolic BP <100
- Hypoxia or RR <12
- ALOC or evidence of head injury

STEMI Pt Notes

- When possible, any 12-lead meeting STEMI criteria shall be transmitted within 10 mins of first STEMI positive 12-lead.
- Scene time for STEMI pts should be ≤10 mins.
- When possible, obtain & relay to the receiving hospital the name/contact information of an individual who can make decisions on behalf of the pt.
- Always relay pertinent medical directives (DNR, POLST, etc.) to the receiving hospital.

