

# Sierra – Sacramento Valley EMS Agency Treatment Protocol

Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)

Effective: 10/01/2025 Approval: Troy M. Falck, MD – Medical Director

Approval: John Poland – Executive Director Next Review: 07/2028

- Common symptoms associated with ACS include, but are not limited to:
  - Dyspnea/SOB - Palpitations
    - Diaphoresis - Nausea/vomiting
    - Upper abdominal pain or heartburn unrelated to meals

**C-6** 

- Discomfort in the throat or abdomen may occur in pts with diabetes, women & 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 SpO<sub>2</sub>

- Lightheadedness/near-syncope/syncope

- O<sub>2</sub> at appropriate rate if hypoxemic (SpO<sub>2</sub> <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
- 12-lead EKG as soon as possible (prior to nitroglycerin administration)
  - 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
  - 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
  - A posterior 12-lead EKG should be performed for pts with ACS symptoms when a standard 12-lead EKG demonstrates ST depression in leads V1 – V3 but does not meet STEMI criteria
- IV/IO at appropriate time during treatment
  - Administer 250 mL NS fluid boluses to maintain SBP >90
  - 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.</li>
- 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



# **Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)**

### **ADDITIONAL ALS TREATMENT & PT DESTINATION**

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

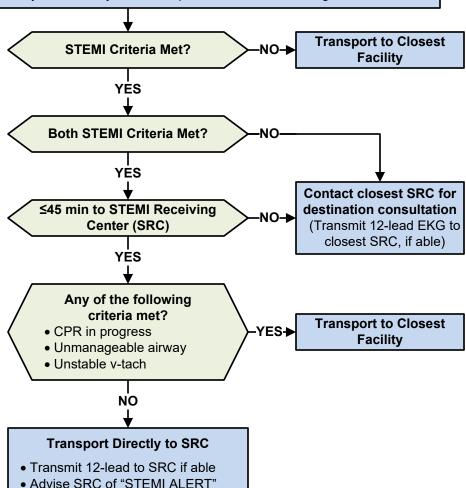
#### **Fentanyl**

- 25 mcg slow IV/IO
- May repeat every 5 mins if discomfort persists (maximum cumulative dose: 200 mcg)
- ① Do not administer fentanyl to pts with any of the following contraindications:
  - Systolic BP <100
- Hypoxia or RR <12
- ALOC or evidence of head injury

## For current or potential nausea/vomiting:

#### **Zofran (Ondansetron)**

- 4 8 mg slow IV/IO, IM or ODT
- May be administered concurrently with fentanyl to reduce potential nausea/vomiting



## **STEMI Pt Notes**

- When possible, any 12-lead EKG meeting STEMI criteria shall be transmitted at least 10 mins prior to SRC arrival
- 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