

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

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Approval: John Poland – Executive Director

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- 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 & 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.

BLS

- 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)

ALS

- 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,
- 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

SEE PAGE 2 FOR ADDITIONAL ALS TREATMENT & PT DESTINATION

**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 Criteria Met?

NO

Transport to Closest Facility

YES

Both STEMI Criteria Met?

NO

YES

≤45 min to STEMI Receiving Center (SRC)

NO

Contact closest SRC for destination consultation
(Transmit 12-lead EKG to closest SRC, if able)

YES

Any of the following criteria met?

- CPR in progress
- Unmanageable airway
- Unstable v-tach

YES

Transport to Closest Facility

NO

Transport Directly to SRC

- Transmit 12-lead to SRC if able
- Advise SRC of "STEMI ALERT"

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