

Chest Pain/Acute Coronary Syndrome – 10.070

TREATMENT:

- A. Treat per Universal Patient Care.
- B. Consider **Oxygen** at 2-4lpm via NC to maintain a SpO₂ ≥94%.
- C. Monitor cardiac rhythm. Obtain a 12 lead ECG no later than 10 minutes after pt's initial complaint or you suspect ACS. This may be done concurrently with other treatments.
- D. Establish IV access. AVOID R WRIST IF POSSIBLE. Attempt second line if possible.
- E. Transport ASAP to closest appropriate cardiac facility.
 1. You may bypass closest receiving with 12 lead indicators and transport to appropriate receiving cardiac hospital.
- F. Obtain vital signs including SpO₂ and obtain a medical history.
 1. Assess circulation and consider volume problem vs. pump problem vs. rate problem.
- G. Consider the following treatment options:
 1. **Aspirin PO 162-324mg** (refer to relative contraindications on med sheet)
 2. **Nitroglycerin 0.4mg SL** if BP is ≥90mmHg. **DO NOT ADMINISTER NTG IF PT HAS USED PHOSPHODIESTERASE INHIBITORS IN LAST 48 HOURS.**
 3. **Nitroglycerin IV 5 mcg/min.** Limit BP drop to 10% if normotensive or 30% if pt is hypertensive. Maintain BP of at least 90mmHg.
 4. **Fentanyl 50 mcg IV/IM/IN** prn. May repeat 50mcg dose prn.
 5. **Morphine Sulfate 2-5 mg** increments IV prn
- H. Treat any dysrhythmias per appropriate Cardiac Dysrhythmia protocol.

PEDIATRIC PATIENTS:

- A. Consider pleuritic causes or trauma.
- B. Contact OLMC for advice.

NOTES & PRECAUTIONS:

- A. Use caution when giving nitroglycerin to patients with an inferior myocardial infarction (ST elevation in II, III and AVF) as this may result in hypotension due to right ventricle involvement. The latter is present in 50% of such infarcts. May administer a **NS** bolus to maintain SBP > 90 at time of **NTG** administration.
- B. In NSTEMI/STEMI patients, avoid **MS** because of the problems with absorption of antiplatelet agents.
- C. If initial 12-lead negative or inconclusive consider repeating every 3-5 minutes if symptoms persist or change.
- D. Email/Fax 12 lead ECG and consult medical control if there are concerns.

FIELD IDENTIFIED ST-ELEVATION MI (STEMI)

Indication: 12-lead ECG with:

- A. Consider automatic ECG Interpretation of "Acute MI"
- B. Paramedic interpretation of probable STEMI
 - a. Women with 1.5 mm ST elevation in V2/V3 or Men with 2 mm ST elevation in V2/V3 and/or
 - b. 1 mm ST elevation in 2 or more contiguous leads
 - c. Local ED calls a STEMI based on transmitted 12-lead ECG if available

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Action:

- A. Activation of **HEART ONE (1-800-461-6049)**.
- B. Do **NOT** activate Heart One for the following STEMI patients: (Transport Code 3 to PCI capable facility still indicated.)
 - a. *Post cardiac arrest patients who have ROSC with or without ST elevation*
 - b. *Age \geq 90*
 - c. *SBP < 90 mmHg or Respiratory Failure*
 - d. *Acute stroke patients with ST elevation*
 - e. *DNR patients*
 - f. *Transfers from hospitals or clinics when cardiologists have been consulted*
- C. Rapid transport to SCMC-B (or other hospital with interventional capability)
- D. If available, transmit 12-lead ECG to destination hospital.

Myocardial Infarction	Leads
Inferior	II, III, aVF
Septal	V1-V2
Anterior	V3-V4
Lateral	I, aVL, V5, V6

DOCUMENT:

1. ABCs
2. Medical History
3. Onset time of signs and symptoms
4. Cardiac Rhythm
5. If a therapy, especially aspirin, was withheld, why
6. SpO₂, VS
7. GCS
8. Color, diaphoresis
9. Lung sounds
10. Response to treatment