

Chest Pain/Acute Coronary Syndrome – 10.070

TREATMENT:

- A. Treat per Universal Patient Care.
- B. Maintain a SpO₂ of ≥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 ≥100mmHg. **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 100mmHg. Titrate prn.
 4. **Fentanyl 50 mcg IV/IM/IN** prn. May repeat 50mcg dose 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 a myocardial infarction as this may result in hypotension irrespective of MI location. May administer a **NS** bolus to maintain SBP > 100 at time of **NTG** administration in patients without signs/symptoms of congestive heart failure. Patients with right ventricular extension (ST elevation in V1 and/or ST elevation in V4R) from an inferior wall myocardial infarction are sensitive to preload and in such cases, nitroglycerin should be used with caution.
- 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 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 ≥ 90*
 - c. *Respiratory Failure with airway management required.*
 - d. *Acute stroke patients with ST elevation*
 - e. *DNR patients*
 - f. *Transfers from hospitals or clinics when cardiologists have been consulted.*
 - g. *0.5mm ST Elevation in V7-V9 Treat as a STEMI but do not activate HEART-One*
- 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
Posterior	V7-V9 (See 'g' above)

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