



Chest Pain: Cardiac and STEMI



History

- Age
- Medications
- **Viagra, Levitra, Cialis**
- Past medical history (MI, Angina, Diabetes, post menopausal)
- Allergies (Aspirin, Morphine, Lidocaine)
- Recent physical exertion
- Palliation / Provocation
- Quality (crampy, constant, sharp, dull, etc.)
- Region / Radiation / Referred
- Severity (1-10)
- Time (onset /duration / repetition)

Signs and Symptoms

- CP (pain, pressure, aching, vice-like tightness)
- Location (substernal, epigastric, arm, jaw, neck, shoulder)
- Radiation of pain
- Pale, diaphoresis
- Shortness of breath
- Nausea, vomiting, dizziness
- **Time of Onset**

Differential

- Trauma vs. Medical
- Angina vs. Myocardial infarction
- Pericarditis
- Pulmonary embolism
- Asthma / COPD
- Pneumothorax
- Aortic dissection or aneurysm
- GE reflux or Hiatal hernia
- Esophageal spasm
- Chest wall injury or pain
- Pleural pain
- Overdose (Cocaine) or Methamphetamine

Universal Patient Care Protocol

P	Rhythm Assessment	P
B	12 Lead ECG	B
I	IV Protocol	I
B	Aspirin (Unless allergy)	B
B	Nitroglycerin SL	B
I	Consider Nitroglycerin Paste	I
P	Continued Pain Morphine Fentanyl Dilaudid	P
P	Nausea and Vomiting Consider Ondansetron Promethazine Metoclopramide	P
Use Protocols as Needed Hypotension Protocol Dysrhythmia Protocols		

M **Notify Destination or Contact MC** **M**

**Positive Acute MI
(STEMI = 1 mm ST
Segment Elevation in
2 Contiguous Leads)**

Legend		
	MR	
B	EMT	B
I	EMT- I	I
P	EMT- P	P
M	Medical Control	M

**Transport based on
EMS System STEMI Plan
with Early Notification**

Keep Scene Time to < 15 Minutes

B	If Transporting to a Non-PCI Center Reperfusion Checklist	B
I	Consider NS Bolus for Inferior MI	I
I	Consider 2 nd IV en route	I

Pearls

- **Recommended Exam: Mental Status, Skin, Neck, Lung, Heart, Abdomen, Back, Extremities, Neuro**
- **Items in Red Text are the key performance indicators for the EMS Acute Cardiac (STEMI) Care Toolkit**
- Avoid Nitroglycerin in any patient who has used Viagra or Levitra in the past 24 hours or Cialis in the past 36 hours due to potential severe hypotension.
- Patients with STEMI (ST-Elevation Myocardial Infarction) or positive Reperfusion Checklist should be transported to the appropriate destination based on the EMS System STEMI Plan
- If patient has taken nitroglycerin without relief, consider potency of the medication.
- Monitor for hypotension after administration of nitroglycerin and narcotics (Morphine, Fentanyl, or Dilaudid).
- Nitroglycerin and Narcotics (Morphine, Fentanyl, or Dilaudid) may be repeated per dosing guidelines in Drug List.
- Diabetics and geriatric patients often have atypical pain, or only generalized complaints.
- Document the time of the 12-Lead ECG in the PCR as a Procedure along with the interpretation (EMT-P)

Protocol 21

Any local EMS System changes to this document must follow the NC OEMS Protocol Change Policy and be approved by OEMS

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