EMS: STEMI POINT OF ENTRY

**ACC/AHA STEMI Criteria**

- Signs / Symptoms of Acute Coronary Syndrome (ACS)
- ST segment elevation of 1mm or more in two contiguous leads
- If ST elevation inconclusive, isolated to V1-V2, then consult with cardiologist.

**GOALS**

- First Medical Contact to ECG ≤ 5 minutes
- First (+) ECG → Activate Code STEMI & Transmit ECG ≤ 5 mins
- Scene time ≤ 10 mins
- First Medical Contact to Balloon ≤ 90 mins
- Transfer with lytics ≤ 120 mins

**EMS Presentation**

911 call with chief complaint of signs & symptoms of ACS

EMS on scene. First Medical Contact to ECG ≤ 5 minutes. Minimize scene time ≤ 10 minutes.

*ECG (+) for STEMI*

Yes

In ≤ 5 minutes of (+) ECG interpretation:
- Activate “Code STEMI” (nearest PCI center)
- Transmit ECG
- Announce ETA

Yes

Estimated time from FMC to Balloon ≤ 90 mins

Yes

Transport to nearest PCI center

No

See Appendix B on the back of this page

Are there contraindications to Fibrinolytics?

Yes

- Notify & transport patient to NPCI for lytics
- Announce ETA
- Leave patient on EMS stretcher for lytic treatment

No

See Appendix A on the back of this page
Appendix A

Patient Priorities Prior to or During Transport

**DO NOT DELAY TRANSPORT**
- Oxygen: titrate to maintain O2 Sat between 94-99%
- Establish saline lock- large bore, (AC preferred, avoid hand)
- Chewable Aspirin PO: Adult 325mg; Baby 324mg
- Heparin 60 units/kg IV, max dose is 4,000 units (if available)
- Cardiac Monitor – attach d-fib pads
- Obtain vital signs and pain scale

Patient Care when time allows

**DO NOT DELAY TRANSPORT**
- Transmit ECG to nearest PCI Receiving center
- Establish 2nd saline lock – large bore, (avoid hand)
- Nitroglycerin 0.4mg SL every 5 min (max 3 doses) until pain subsides & SBP remains > 100 (Caution with Inferior MI)
- Morphine or Fentanyl IV PRN for chest pain unrelieved by NTG

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*Appendix B*

**Fibrinolytic Checklist:**

*Must be completed prior to administration. If any below are “yes”, fibrinolysis may be contraindicated. Contact receiving physician for guidance.*

**Absolute Contraindications**
- Yes [ ] No: Any prior intracranial hemorrhage
- Yes [ ] No: Known structural cerebral vascular lesion (ie: arteriovenous malformation)
- Yes [ ] No: Allergy to thrombolytics
- Yes [ ] No: Ischemic stroke < 3 months
- Yes [ ] No: Known malignant intracranial neoplasm
- Yes [ ] No: Suspected aortic dissection
- Yes [ ] No: Active bleeding or bleeding diathesis (excluding menses)
- Yes [ ] No: Significant closed-head or facial trauma < 3 months
- Yes [ ] No: Severe uncontrolled hypertension (unresponsive to emergency therapy)
- Yes [ ] No: Intracranial or intraspinal surgery within 2 months
- Yes [ ] No: For streptokinase, prior treatment within the previous 6 months

**Relative Contraindications**
- Yes [ ] No: History of chronic, severe, poorly controlled hypertension
- Yes [ ] No: Significant HTN on presentation (SBP >180mmHg or DBP > 110mmHg)
- Yes [ ] No: History of prior ischemic stroke > 3 months
- Yes [ ] No: Dementia
- Yes [ ] No: Known intracranial pathology not covered in absolute contraindications
- Yes [ ] No: Traumatic or prolonged CPR > 10 minutes
- Yes [ ] No: Recent internal bleeding (<4 weeks)
- Yes [ ] No: Major surgery < 3 weeks
- Yes [ ] No: Noncompressible vascular punctures
- Yes [ ] No: Pregnancy
- Yes [ ] No: Active peptic ulcer
- Yes [ ] No: Oral anticoagulant therapy

* Viewed as advisory for clinical decision making and may not be all-inclusive or definitive.