

# STEMI Protocol

## ED Evaluation

History or examination concerning for STEMI

- Vital signs with continuous cardiac monitoring
- EKG with goal door-to-EKG time <10 min.
- Chest X-ray
- Lab Work (not required for treatment)
  1. CBC
  2. BMP
  3. Troponin

Concern for other pathology (e.g., dissection)?

Evaluate and manage appropriately

## Diagnose STEMI

- Two peripheral IVs
- Aspirin 324 mg PO or 300 mg PR
- UFH with bolus of 60 U/kg (maximum of 4000 U) followed by 12 U/kg/hr (maximum of 1000 U/hr)
- Supplemental O2 if SaO2 <90%
- Consider opioid analgesia for pain\*
  - Morphine 0.1 mg/kg IV, redose at 0.05 mg/kg Q10M
  - Fentanyl 0.5-1 µg/kg IV, redose at 0.5 µg/kg Q10M
- Consider IV nitroglycerin 10 µg/min for hypertension
  - Titrate to desired blood pressure
  - Recommend against routine use of sublingual nitroglycerin
  - May consider GTN 0.4 mg SL for refractory anginal pain

- \*Hold for:**
1. Bradycardia <60
  2. SBP <90 mmHg
  3. Respiratory depression

- †Fibrinolytic contraindications:**
1. Prior ICH
  2. Known cerebral vascular malformation
  3. Ischemic stroke <3 months prior
  4. Known intracranial malignancy
  5. Bleeding diathesis
  6. Intracranial/spinal surgery <2 months prior
  7. Suspected aortic dissection
  8. Severe uncontrolled HTN
  9. Head or facial trauma <2 months prior
  10. Persistent ischemic symptoms >12 hours

## PCI-capable facility

Activate Cath Lab  
(Goal door-to-balloon <90 minutes)

Ticagrelor 180 mg PO load  
OR  
Clopidogrel 600mg PO load

## Definitive care

Transfer to PCI-capable facility

## Non-PCI-capable facility

Presentation-to balloon time <120 minutes?

NO

Contraindications to fibrinolytic therapy?†

YES

NO

## PCI preferred

## Fibrinolysis Preferred (Goal door-to-needle <30 minutes)

- Tenecteplase IV push
  - 30 mg for <60 kg
  - 35 mg for 60-70 kg
  - 40 mg for 70-80 kg
  - 45 mg for 80-90 kg
  - 50 mg for >90 kg
- Clopidogrel 300 mg PO load
  - Decrease dose to 75mg PO for age >75