**Syndromes Suggestive of Ischemia or Infarction**

**EMS assessment and care and hospital preparation***

- **Aspirin**: 160–325 mg (If not already taken)
- **Oxygen**: If O₂ Sat <90% OR if short of breath
- **12-lead ECG**
- **Activate Cardiac Cath Lab**
- **Morphine for Pain Control**
- Consider Nitroglycerin Sublingual or spray if indicated

**Concurrent ED/Cath Lab assessment (<10 minutes)**

- Check Vital Signs
- IV Access
- Physical Exam
- Cardiac Markers Complete Blood Coagulation Studies
- Chest X-ray (<30 mins)
- 12-lead ECG

**Immediate ED general/Cath Lab treatment**

- Oxygen: If O₂ Sat <90% OR if short of breath
- **Aspirin**: 160–325 mg (If not already taken)

**ECG Interpretation**

- **ST-elevation MI (STEMI)**
  - Start adjunctive therapies as indicated
  - Do not delay reperfusion

- **High-risk unstable angina/non-ST-elevation MI (UA/NSTEMI)**
  - Troponin elevated or high-risk patient
  - Consider early invasive strategy if:
    - Refractory ischemic chest discomfort
    - Recurrent/persistent ST deviation
    - Ventricular tachycardia
    - Hemodynamic instability
    - Signs of heart failure
  - Start adjunctive treatments as indicated
    - Nitroglycerin
    - Heparin (UFH or LMWH)
    - Angiotensin-converting enzyme inhibitors
    - HMG-CoA reductase inhibitors
    - Consider: PO β-blockers
    - Consider: P2Y₁₂ inhibitors
    - Consider: Glycoprotein IIb/IIIa inhibitor
  - Admit to monitored bed. Assess risk status. Continue ASA, heparin, and other therapies as indicated.

- **Low-/Intermediate-risk ACS**
  - Develops 1 or more:
    - Clinical high-risk features
    - Dynamic ECG changes consistent with ischemia
    - Troponin elevated
  - Consider: PO β-blockers
  - Consider: P2Y₁₂ inhibitors
  - Consider: Glycoprotein IIb/IIIa inhibitor
  - Abnormal diagnostic noninvasive imaging or physiologic testing?
  - If no evidence of ischemia or infarction by testing, can discharge with follow-up

**Reperfusion goals:**
- First medical contact-to-balloon inflation (PCI)**: goal of 90 minutes
- Door-to-needle (fibrinolysis) goal of 30 minutes

**Time from onset of symptoms**

- ≤12 hours
- >12 hours


**Version control: This document follows 2020 American Heart Association® guidelines for CPR and ECC. American Heart Association® guidelines are updated every five years. If you are reading this page after December 2025, please contact support@acls.net for an update. Version 2021.06.a

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