

Guidelines for Effective Management of Unstable Angina

Patients With Unstable Angina With and Without PCI.
Adapted, updated, and based upon ACC/AHA Recommendations (September, 2000) for UA/NSTEMI and ACC/AHA 1999 MI Guidelines.

Original Guidelines Developed by Kurt Kleinschmidt, MD, FACEP for **Emergency Medicine Reports** (November 2000)
Acute Coronary Syndrome (ACS): Pharmacotherapeutic Interventions For UA/NSTEMI— An Evidence-Based Review And Outcome-Optimizing Guidelines For ACS Patients With And Without Procedural Coronary Intervention (PCI)

CHEST PAIN TRIAGE

TRIAGE ASSESSMENT

- Pain Description • Age • Sex • CAD Hx
- Cocaine • Risk Factors for CAD

Non-Ischemic
Non-Cardiac

Evaluate and Treat Suspected Etiology

Possible or Definite ACS

12-LEAD ECG WITHIN 10 MINUTES

- Intravenous access
- Oxygen
- Continuous ECG monitor
- Aspirin (alternative: clopidogrel for aspirin intolerant patients)
- Consider
 - Cardiac markers
 - Beta-blockers
 - Nitroglycerin
 - Morphine sulfate

ST-Segment Elevation or New or Presumably New Bundle Branch Block

New ST-Segment Depression or T-wave Inversion
Initial Cardiac Enzymes Elevated

No ECG Change or Normal ECG

RISK STRATIFY

- Complete H & P
- Consider
 - Serial ECGs or continuous segment monitoring
 - Second set cardiac markers (at ≥ 6 hours after chest pain onset)
 - If first troponin obtained at < 6 hours, obtain second set between 6-12 hours
 - 2-D echocardiogram
- Observation 4-12 hours
 - Emergency department
 - Chest pain unit
 - 24 hours observation
 - Admission
- Pain relief (initiate or intensify)
 - Beta-blocker
 - Nitroglycerin
 - Morphine sulfate

RE-EVALUATE PATIENT FOR HIGH-RISK STATUS ACCORDING TO THE FOLLOWING CRITERIA:

- History—
- Presence of chest pain
 - Two or more episodes of resting angina during the previous 24 hours
 - History of three or more cardiac risk factors (diabetes, smoking, elevated LDL-cholesterol)
 - Known coronary artery disease (CAD), defined as documented 50% or greater stenosis in at least one major coronary artery
 - Prior chronic aspirin intake for CAD prevention
- PE—
- Age 65 years or older
 - Congestive heart failure
- ECG—
- New ST-segment deviation of 0.5 mm or greater in limb and/or precordial leads
 - New pathological Q waves
 - Sustained ventricular tachycardia
- MARKERS—
- Significant elevation of cardiac markers

YES

NO

LOW RISK

Low Risk

- Treat suspected etiology
- Consider stress testing to provoke ischemia (prior to discharge or as an outpatient)
- Follow-up as needed

Enoxaparin (preferred) or unfractionated heparin

ECG change or marker increase

YES

NO

Medical Management (Includes enoxaparin or unfractionated heparin)

Follow Protocols/Guidelines for NSTEMI or STEMI, depending on nature of ECG changes

IF ANY ONE OF THE FOLLOWING:

- Recurrent Angina • CHF • Hemodynamic Instability
- Sustained V-Tach • PCI within 6 months • Prior CABG

YES

NO

Early PCI

Continued Medical Therapy