

# Chest Pain Triage Tree

This guide is intended to help determine the level of risk for developing cardiac complications in individual patients presenting with chest pain and determine their appropriate disposition from the emergency room.

Chest Pain or "angina pectoris" unrelated to trauma or (noncardiac) CXR abnormalities

ABCs, Initial ECG

### Suspected MI on ECG

- ST elevation  $\geq 1$  mm or Q waves in 2 or more leads
- Changes not known to be old.
- Cardiology consult to assess for immediate percutaneous coronary intervention.

### Suspected Ischemia on ECG

- ST depression  $\geq 1$  mm or T wave inversion in 2 or more leads
- Changes not known to be old.
- Cardiology consult to assess for immediate percutaneous coronary intervention.

### ECG "nonspecific"

(No specific criteria for MI or ischemia)

### Evaluate for factors which increase risk of cardiac complications:

#### History:

- Increase in previously stable angina
- New-onset post-infarction angina or angina following any revascularization procedure
- Pain similar to, or more severe than, that associated with prior MI
- Current chest pain that is:
  - Similar to that attributed in past to documented CAD *or*
  - Typical angina in a man  $>30$  y/o or woman  $>40$  y/o *or*
  - Atypical angina in a man  $>50$  y/o or woman  $>60$  y/o

#### Physical Examination:

- Systolic BP  $<110$  mmHg
- Bilateral pulmonary rales above lung bases or other exam findings consistent with decompensated heart failure

Two or more risk factors

One risk factor

No risk factors

**Admit to Coronary Care Unit:\***  
(Moderate-high risk of complications)  
If no evidence of MI or complications at 24-48 hours, transfer to intermediate care may be warranted.

### **6-12 hour Observation in Monitored Setting:\***

(Low risk of complications)

- Evaluation with serial ECGs and at least two sets of cardiac enzymes (CPK-MB with or without Troponin)
- Transfer to CCU is appropriate if complications develop
- Negative observation evaluation may warrant subsequent noninvasive testing if other (traditional) cardiac risk factors are present

### **Evaluate for factors which reduce risk:**

- Pleuritic chest pain
- Sharp or stabbing pain
- Positional chest pain
- Chest pain reproduced by palpation

Absent

(Any) Present

### **Discharge\***

(with appropriate follow-up or refer for outpatient evaluation)

\*Unless other identified medical conditions indicate the need for hospital admission or care in another setting.