

Clinical Scenario

Chest Pain



Scenario:

81 year old female, c/o left chest pain radiating to both her back and left arm x3 hours. Denies SOB, denies muscle strain, no HX of CAD

Initial vital signs:

O₂ sat 99% on RA, T 36.9, HR 117, RR 22, BP 190/82

ED Course:

500cc IVF bolus then 75/hr, ASA, NTG paste, EKG sinus tachycardia, mild ST-T wave changes

At Time of Decision:

HR 88, RR 18, BP 140/68, sat 99% on RA, no c/o of chest pain

Medical Hx: COPD, HTN, Obesity

Radiology: CXR neg

Labs: mild elevated troponin 0.092, Renal wnl, CBC wnl

Recommended Workflow

C- Consider appropriate care setting

- Hospitalization

A- Ask what the principal diagnosis is?

- Chest Pain

R- Review INPT guideline first, then OBS

- INPT criteria: not met > toggle to OBS
- OBS criteria: met

E- Enter bed status / level of care order

- Observation

D- Document criteria points in medical record

INPATIENT

- Indicated for one or more:
 - Unstable VS
 - VS not corrected by treatment, one:
 - tachycardia >100
 - hypotension
 - orthostatic hypotension
 - Respiratory distress, BOTH:
 - One:
 - Dyspnea
 - RR > 18
 - Abnormal breathing pattern
 - Other respiratory difficulty signs
 - Evidence of compromise, One:
 - Hypoxemia
 - Altered mental status
 - Other compromising signs (CHF)
 - Chest pain other than CAD (dissection)
 - Severe pain requiring INPT care
 - Angina or MI = see specific guideline

OBSERVATION

- Indicated for one or more:
 - Suspected cardiac ischemia with nondiagnostic initial evaluation
 - Persistent pain despite ED care
 - Other suspected diagnosis requiring observation and monitoring during diagnostic evaluation (emboli, dissection)

Teaching Points:

- **Inpatient guidelines** for Chest Pain or Angina are for unstable patients, or for suspected diagnosis that requires acute level of care (aortic dissection, pulmonary embolism).
- **Observation guidelines** are to be used for patients who are stable and have suspected cardiac ischemia during initial evaluation and require further evaluation beyond ED care (serial biomarkers, treadmill).
- Myocardial Infarction INPT guideline is warranted when cardiac biomarkers are new, elevated but not chronically elevated, and/or acute ischemic changes per cardiac imaging studies
- Angioplasty, Percutaneous Coronary Intervention guideline is intended for planned elective percutaneous coronary intervention (PCI), which is to be used for medically stable patients, not requiring hospital services preoperatively (postoperatively status may change)