

Differential of Chest Pain

Myocardial Infarction

✓ Common

✓ Symptoms

- Tight, heavy, crushing central chest pain
- Nausea, vomiting, anxiety, sweating
- Radiation to arms, jaw

✓ Signs

- In pain, sweaty, tachycardia (may have signs of MI complications, e.g shock, heart failure) (But may have none)

✓ Investigation

- ECG
- Chest X-Ray
- Cardiac Enzymes/troponin

Angina

✓ Very common

✓ Symptoms

- Tight, heavy central chest pain.
- Radiation to arms, jaw
- Precipitated by exertion
- Alleviated by rest, GTN

✓ Sign

- May have none

✓ Investigation

- ECG
- Exercise test
- Coronary angiogram
- Troponin

Pulmonary Embolus

- ✓ Common
- ✓ Symptoms

- Central or pleuritic chest pain
- Sudden onset shortness of breath
- Hemoptysis

- ✓ Signs

- Tachycardia
- Tachypnea
- Raised JVP
- Hypotension
- Shock
- Pleural rub

- ✓ Investigation

- ECG
- Fibrin degradation products
- Chest X-Ray
- Blood Gases
- V/Q scan
- CTPA
- Troponin

Aortic Dissection

✓ Rare

✓ Symptoms

- Very sudden onset "tearing" chest pain or back pain
- Collapse
- Nausea, sweating, vomiting

✓ Signs

- Hypertension
- BP difference between arms
- Absent pulses
- Neurological deficits

✓ Investigation

- Chest X-ray
- ECG
- CT Chest/MRI
- Echocardiogram

Pericarditis

✓ Rare

✓ Symptoms

- Burning, aching or heavy chest pain
- Relieved by sitting forwards

✓ May have pericardial rub

✓ Investigation

- ECG
- Echocardiogram

Musculoskeletal

✓ Very common

✓ Symptoms

- Localized pain
- Exacerbated or reproduced by movement, breathing, coughing

✓ Sign

- Localized tenderness

✓ Investigation

- Normal ECG
- Chest X-ray

Dyspepsia/esophageal reflux

✓ Very common

✓ Symptoms

- Central, epigastric, substernal sharp or burning pain
- Can radiate to back
- Relief with antacids

✓ Signs

- Epigastric tenderness (or none)

✓ Investigation

- Normal ECG
- Chest X-ray

Pleurisy

✓ May be due to pneumonia, viral infections, malignancy, PE

✓ Common

✓ Symptoms

- Sharp, localized, stabbing pain
- Exacerbated by breathing, coughing, movement

✓ Signs

- Pleural rub
- May have signs of consolidation
- Fever

✓ Investigation

- Chest X-ray