

Chest Pain

DD Of Chest Pain

- Distinguish between chest pain of **CARDIAC** and **NON-CARDIAC** origin
- **Case History Considerations**
- Presenting complaint
- Past medical History
- Drug, family and social history

Presenting Complaint

Because the causes of chest pain are so diverse, a good history is important.

In order to differentially diagnose it is important to pay particular emphasis to the characteristic of the Pain.

Is the pain...

- Continuous or intermittent
- Duration
- Position of pain
- How is it indicated/Quality of the pain
- WF/BF
 - exertion, food, emotion, posture, exercise, movement, breathing
- Radiation of the pain

Past Medical History

- History of heart disease
- History of lung disease
 - COAD, pneumothorax, Infection
- History of GIT disease
 - oesophagitis, ulcers, indigestion, NSAID's
- Recent surgery
 - PE, infection, foreign travel
- Hypertension
 - risk factors for AAA & Ischemic heart disease

Drug, Family & Social History

- Familial history of heart disease
- High Risk Factors
 - Heavy smoker/drinker
 - Family history / Ethnic Origin
 - Rheumatic fever
 - Congenital abnormalities
- Drug history

Differential Diagnosis Of Chest Pain	
System Involved	Pathology
Cardiac	MI Angina Pectoris Pericarditis Prolapse of mitral valve
Vascular	Aortic dissection
Respiratory	PE Pneumonia Pneumothorax Pulmonary neoplasm
GIT	Oesophagitis Oesophageal tears Peptic ulcer Biliary disease
Musculoskeletal	Csp root compression Costochondritis Fracture
Neurological	Herpes Zoster

Characteristics Of Different Types Of Chest Pain					
Characteristic	Myocardial ischemic	Pericarditis	Pleuritic pain	GIT Disease	Musculoskeletal
Quality of Pain	Crushing, tight or bandlike	Sharp (may be crushing)	Sharp	Burning	Usually sharp may be a dull ache
Site of pain	Central anterior chest	Central anterior	Anywhere (usually very localised pain)	Central	May be anywhere
Radiation	To throat, jaw or arm	Usually no radiations	Usually no radiations	To throat/ back	To arms or around chest to back
WF/BF	WF: exertion, anxiety, cold BF: rest and glyceryl trinitrate	WF: lying back BF: sitting forward	WF: breathing, coughing or movement BF: shallow breath	Peptic BF: food Biliary/ oesophageal WF: food	WF: pressure on chest wall, mvf of the neck BF: cold/hot compresses
Associated Symptoms	Sweaty, dyspnoea, nausea	Fever, recent viral illness	Cough, haemoptysis Dyspnoea Shock (PE)	Excessive wind	Other joints affected patient looks otherwise well

Overview Of Dissection Of The Thoracic Aorta	
Predisposing Factors	Hypertension, bicuspid aortic valve, pregnancy, Marfans, Turners, Noonans syndrome, Connective tissue disease, SLE Men-Women, Middle aged
Pathophysiology	Damage to the media and high intraluminal pressure causing an intimal tear. Blood enters and dissects the luminal planes of the media creating a false lumen.
Classification	Type A: all dissections involving the ascending aorta. Type B: all dissections not involving the ascending aorta.
Symptoms	Central tearing chest pain radiating to the back, further complications as the dissection involves branches of the aorta. Coronary ostia – MI, Carotid or spinal arteries – hemiplegia, dysphagia or paraplegia; Mesenteric arteries – abdominal pain.
Signs	Patient shocked, cyanosed, sweating. Radial femoral delay. Aortic regurgitation, cardiac failure
Investigations	CXR/CT scan/MRI ECG Transoesophageal ultrasound
Management	Pain relief, IV drip, BP control. Surgery Type A. Management and possible surgery type B

Conditions Predisposing To DVT	
Condition	Examples
Immobility	Prolonged bed rest for any reason, long air journeys.
Postoperative	Abdominal, pelvic, hip and leg surgery.
Haemoconcentration	Diuretic therapy, Polycythaemia
Hypercoagulable states	Malignancy, contraceptive pill, protein deficiencies
Venous stasis	CHD, atrial fibrillation (formation of thrombus in right ventricle = PE)



