



MUM
IM'S

APPROACH TO CHEST PAIN



“What features suggest the pain is from cardiac causes ?”

Feature	Ischaemic Cardiac Chest Pain
Location	Central, Diffuse
Quality	Tight, Squeezing, Choking
Radiation	Jaw/ Neck/ Shoulder/ Arm/ Back
Precipitation	Exertion/ Emotion
Relieving factors	Quick relief by rest and nitrates
Associated features	Breathlessness





Dr! My chest hurts!

Can you tell me exactly where the pain started?



LEFT/RIGHT SIDE (UNILATERAL)

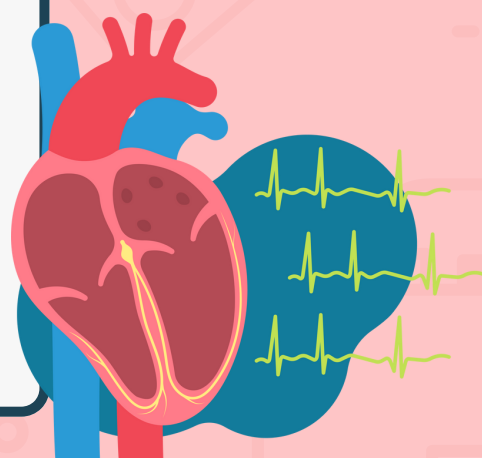
- Pulmonary causes
- Musculoskeletal causes
- Herpes Zoster (dermatomal distribution)

RETROSTERNAL

- Acute Coronary Syndrome
- Pericarditis
- Thoracic Aortic Aneurysm
- Aortic Dissection

EPIGASTRIC

- Atypical presentation of Myocardial Infarction
- Abdominal Aortic Aneurysm
- Aortic Dissection
- Acute Pancreatitis
- Peptic Ulcer Disease
- GERD, Esophagitis
- Mallory-Weiss Syndrome
- Esophageal Rupture (Boerhaave Syndrome)





Does the pain go
anywhere else?

Dr! It
goes
to...



Neck, Jaw, Left Arm

Think cardiac causes

- Acute Coronary Syndrome
- Aortic Dissection
- Pericarditis
- Aortic Stenosis

Upper back (Thoracic region)

- Thoracic Aortic Aneurysm
- Aortic Dissection
- Atypical MI
- Mallory-Weiss Syndrome
- Esophageal Rupture (Boerhaave Syndrome)

Lower back (Thoracic region)

Think GI causes

- Acute Pancreatitis
- Peptic Ulcer Disease
- Mallory-Weiss Syndrome
- Esophageal Rupture (Boerhaave Syndrome)

No radiation

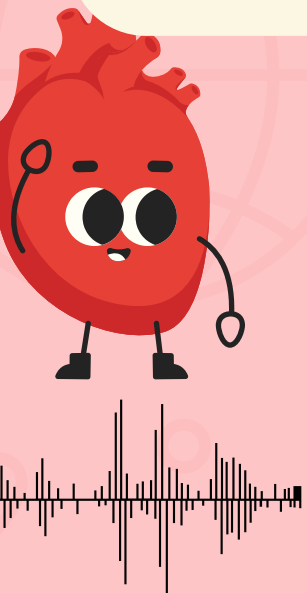
No radiation does not rule out cardiac causes

Think pulmonary causes

- Pulmonary Embolism
- Pneumothorax
- Pneumonia
- Pleural Effusion
- Neoplasia of any structure in the thorax

Other causes

- Costochondritis
- Herpes Zoster





How did the pain start ?

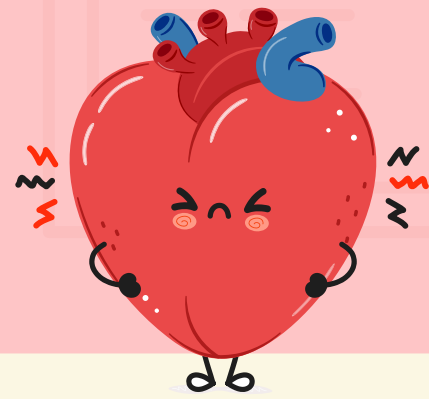
Dr! It
started
...



Sudden onset

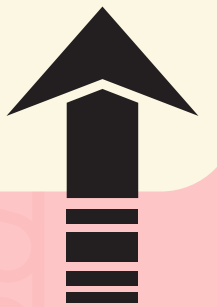


- Aortic Dissection
- Pulmonary Embolism
- Pneumothorax
- Myocardial Infarction



Gradual onset

- Stable Angina
- GERD



During exertion

- Stable Angina
- Acute Coronary Syndrome
- Musculoskeletal



After exertion

- Musculoskeletal
- Psychological





How would you describe the pain?

Dr! It feels like...



CRUSHING & SQUEEZING



- Stable Angina
- Acute Coronary Syndrome

DULL/ ACHING



Musculoskeletal causes:

- Muscle Strain
- Costochondritis

SHARP/ STABBING



- Pericarditis
- Pulmonary Embolism
- Pneumothorax
- Pneumonia

TEARING/ RIPPING

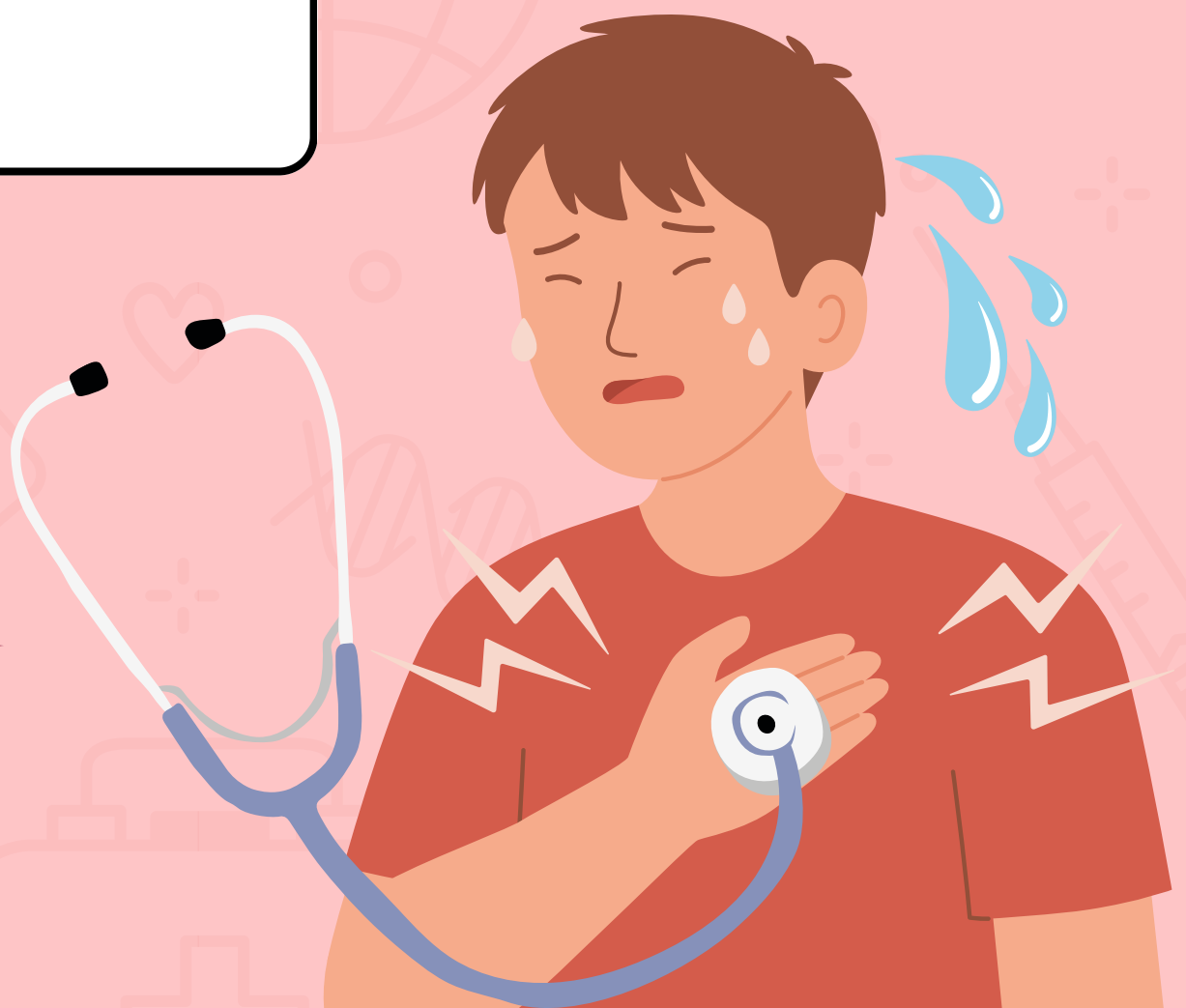


- Aortic Dissection

BURNING



- GERD
- Esophagitis





Anything that makes your condition better/ worse?



Aggravating factor

Relieving factor

- Stable Angina
- Unstable Angina

- Exertion

- Rest
- GTN

- NSTEMI
- STEMI

- Exertion

- Not relieved by rest/GTN

- Pulmonary Embolism
- Pericarditis
- Pneumothorax
- Pneumonia
- Tuberculosis
- Pleural Effusion

- Deep inspiration
- Coughing (pleurisy)

-

- Pericarditis

- Lying down
- Deep inspiration
- Coughing
- Swallowing

- Sitting forward

- GERD
- Peptic Ulcer Disease
- Pancreatitis

- Lying down
- After meals
- Certain food & beverages

- Sitting forward

- Costochondritis
- Rib Fractures

- Touching
- Pressure
- Coughing

- Immobilization





Any other symptoms that came along with your chest pain?

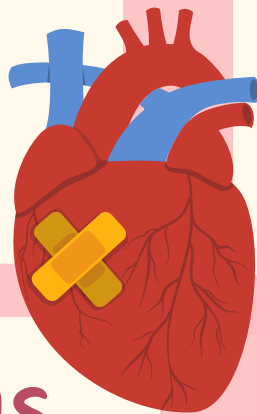
Dr!
I have

...



ACUTE CORONARY SYNDROME

- SOB
- Diaphoresis
- Nausea & Vomiting



PERICARDITIS

- Viral Prodrome
- Low grade fever
- Cough
- Night sweats
- Autoimmune disorders

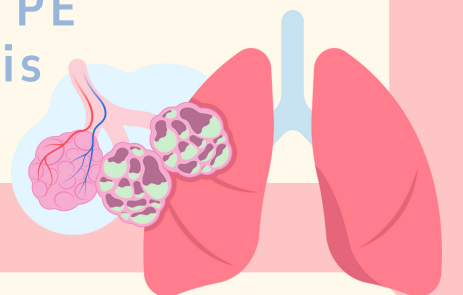


AORTIC STENOSIS

- Syncope on exertion
- Angina
- Dyspnea

PULMONARY EMBOLISM

- Hx of DVT/ PE
- Haemoptysis



PNEUMONIA

- Fever
- Productive Cough
- SOB
- Malaise, Headache
- Sick Contacts

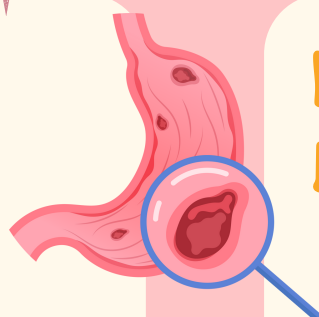
PNEUMOTHORAX

- SOB
- Trauma
- Hx of asthma/ emphysema



GERD, ESOPHAGITIS

- Heartburn
- Acid Regurgitation



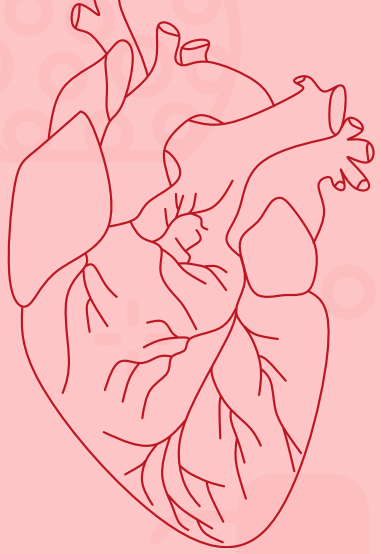
PEPTIC ULCER DISEASE

- Haematemesis
- Dyspepsia





Differential Diagnosis of Chest Pain



CARDIAC

- Myocardial Infarction 
- Angina Pectoris
- Pericarditis
- Mitral Valve Prolapse

AORTIC

- Aortic Dissection 
- Aortic Aneurysm

MSK

- Rib Fracture/ Injury
- Costochondritis
- Osteoarthritis
- Intercostal Muscle Injury

OTHERS

- Herpes Zoster (Shingles)
- Anxiety / Emotion
- Thoracic Outlet Syndrome

PULMONARY

- Pulmonary Embolism 
- Pneumothorax 
- Malignancy
- Pneumonia
- Tuberculosis
- Pulmonary Infarct
- Bronchospasm

ESOPHAGEAL

- Esophageal Rupture 
- Esophagitis
- GERD
- Esophageal Spasm
- Mallory-Weiss Syndrome

Seek urgent medical attention if these are suspected 



REFERENCES

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