



Chapter 26 – Chest Pain

Episode overview:

- 1) List 6 critical causes of chest pain

Wisecracks:

- 1) Walk through a systems approach to chest pain including common and uncommon causes of chest pain
 - 2) Outline your approach to the person with sudden onset severe chest pain
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Rosen's in Perspective

- Symptom caused by numerous diseases
 - Afferent visceral fibers from the heart, lungs, great vessels, esophagus enter the same thoracic dorsal ganglia. This results in the same indistinct quality and location of pain. This is typically described as:
 - Burning
 - Aching
 - Stabbing
 - Pressure
 - Because these nerve segments overlap three segments above and below an individual level, the pain can be produced from the jaw to epigastrium with radiation.



1) List 6 critical causes of chest pain:

Table 26-1 Differential Diagnosis of Chest Pain

ORGAN SYSTEM	CRITICAL DIAGNOSES	EMERGENT DIAGNOSES	NONEMERGENT DIAGNOSES
Cardiovascular	Acute myocardial infarction Acute coronary ischemia Aortic dissection Cardiac tamponade	Unstable angina Coronary spasm Prinzmetal's angina Cocaine-induced pericarditis or myocarditis	Valvular heart disease Aortic stenosis Mitral valve prolapse Hypertrophic cardiomyopathy
Pulmonary	Pulmonary embolus Tension pneumothorax	Pneumothorax Mediastinitis	Pneumonia Pleuritis Tumor Pneumomediastinum
Gastrointestinal	Esophageal rupture (Boerhaave's syndrome)	Esophageal tear (Mallory-Weiss) Cholecystitis Pancreatitis	Esophageal spasm Esophageal reflux Peptic ulcer Biliary colic
Musculoskeletal			Muscle strain Rib fracture Arthritis Tumor Costochondritis Nonspecific chest wall pain
Neurologic			Spinal root compression Thoracic outlet Herpes zoster Postherpetic neuralgia
Other			Psychological Hyperventilation

Wisecracks:

1) Walk through a systems approach to chest pain including common and uncommon causes of chest pain

Some system causes to think about in addition to the **BIG SIX**

- **CARDIO** (cocaine induced-angina/vasospasm)
- **PULMONARY**
- **GI** (Mallory-Weiss; cholecystitis; pancreatitis)
- **MSK** (muscle strain; rib fracture; costochondritis; chest wall pain)
- **NEURO** (spinal root compression; thoracic outlet syndrome; herpes zoster; post-herpetic neuralgia)
- **OTHER** (psychological; hyperventilation)

2) Outline your approach to the person with sudden onset severe chest pain

- Approach it similarly to acute onset dyspnea:
 - Simultaneously **EVALUATE**, **IDENTIFY**, and **INTERVENE**
 - **MOVIE**
 - Monitors
 - Oxygen
 - Vitals
 - IV



- Equipment and environment
 - Labs
 - ECG
 - Portable CXR
 - Full history and physical