ABSTRACT

Chest Pain - Differential Diagnosis

Chest pain is a very common chief complaint that drives patients seek medical treatment in clinic and emergency development.

There is a myriad of aetiologies of chest pain, from benign to life-threatening. The causes of chest pain can be generally classified into cardiac and noncardiac origins.

Approach to the diagnosis and workup of the patient presenting with chest pain in the clinic setting will be discussed.

The most important principle is to rule out acute life threatening causes of chest pain: acute coronary syndrome, pulmonary embolism, tension pneumothorax and aortic dissection.

Some practical points:

1. Take a good history. Patient will tell you the diagnosis if you care to listen enough.

2. Acute coronary syndrome (ACS) is the most common cardiac cause of life threatening condition. Patients usually (but not always) have cardiovascular risk factors (smoking, diabetes, hypertension, high cholesterol, family history). 12-lead electrocardiography (ECG) should be performed in persons at high risk of ACS. Appropriate initial treatment should be given to patients once the diagonal is made before sending them to the nearest hospital for further treatment. The principle of the management of ACS in clinic setting will be discussed more detail in the lecture.

3. Diabetics and the elderly may have neuropathy which may make them to interpret pain differently. They may have more atypical presentations of ACS.

3. Chest wall pain (muscular pain), gastrointestinal reflux diseases and costochondritis are the common benign causes of chest pain in the primary care population. Cardiac neurosis (anxiety and panic) is the diagnosis of exclusion.

4. Some “Red flags” that alert more sinister causes of chest pain: Abnormal and unstable vital signs (tachycardia, bradycardia, tachypnea, hypotension), signs of hypoperfusion (eg, confusion, pale, diaphoresis) , shortness of breath, hypoxemia on pulse oximetry, asymmetric breath sounds on auscultation of lungs. asymmetric peripheral pulses and new heart murmurs.

DR.GOH ENG LEONG