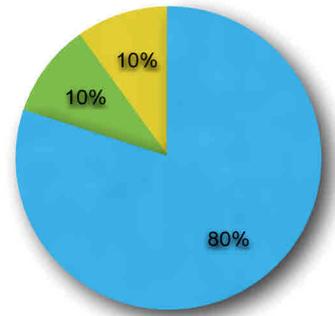


Cardiovascular Examination

History: This patient is experiencing chest pain.

Task: Examine the cardiovascular system, present your findings and suggest further management.



● examination ● communication ● management

Marking Criteria	Not Completed	Partially Completed	Completed
Washed hands, introduction, confirms patient identity, explanation of process, ensures comfort			
Checks notes, X-rays & ECGs			
Exposes chest			
Inspects chest from end of bed Comments on general appearance – including anaemia, central cyanosis, breathlessness			
Examines both hands and comments on: clubbing, splinter haemorrhages, Koilonychia, nail fold infarcts, Osler's nodes / Janeway lesions, colour, temperature			
Checks radial pulse (rate and rhythm), brachial (character)			
Positions patient at 45 degrees, correctly identifies JVP			
Checks face (Cyanosis, Anaemia, Arcus, Malar flush)			
Checks carotid pulse			
Locates the apex beat (5 th ic space mc line)			
Feels for heaves and thrills and correctly relays findings			
Auscultates heart in 4 areas: mitral area, tricuspid area, pulmonary area, aortic area			
Rolls onto left side for Mitral murmur (Axilla)			
Sits forward and listens for aortic murmur at end expiration			
Listens to carotids bruit & murmur			
Listens to back for VSD or PDA murmur			
Percussion and auscultation of lung bases			
Examines abdomen for ascites, hepatomegaly, AA, kidneys, renal artery bruits, sacral oedema			
Checks for ankle oedema/ peripheral pulses			
Helps patient get dressed again			
Thanks patient			
Summarises findings succinctly			
Makes appropriate diagnosis			
Suggests need for BP, ECG, echo, blood cultures, urine dip			
Overall			

Cardiovascular Examination

Level 1 Understanding

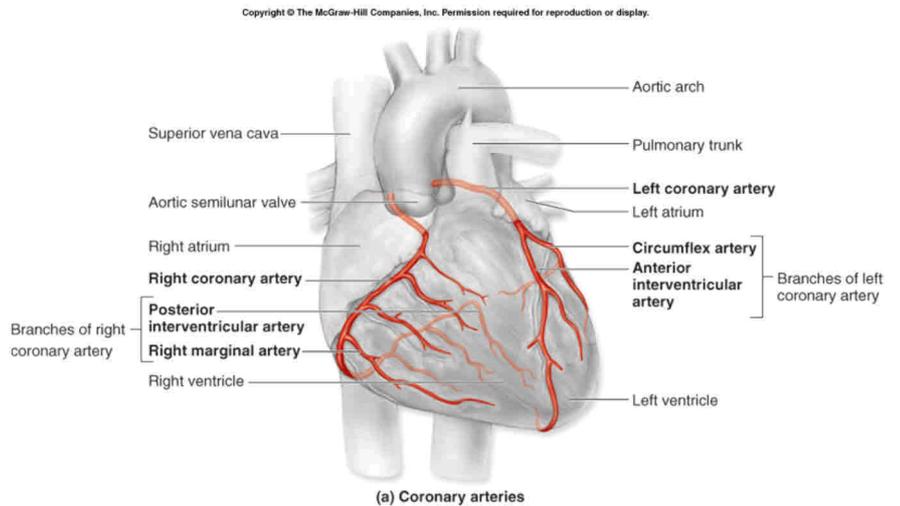
(basic sciences)

Draw the coronary circulation.

Level 2 Understanding

(applied sciences)

Describe the anatomical relationship of the heart in terms of area (inferior, lateral, anterior, etc) with the corresponding arterial and ECG lead locations.



Anterior = LCA = I + aVL

Anteroseptal = LAD = V1-3

Anterolateral = CX = V1-6

Septal = LAD = V2-4 only

Lateral = CX = V4-6, +/- I & aVL

Inferior = RCA = II + III + aVF

Inferolateral = RCA/CX = II + III + aVF + V4-6

Apical = RCA/LAD = II + III + aVL + V2-4

Posterior = RCA = R/S ratio >1 in V1 and V2; T-wave changes (ie, upright) in V1, V8, and V9

Right ventricular = RCA = RV4, RV5

Level 3 Understanding (advanced sciences)

Focused transthoracic echocardiography is being used more often in the acute setting.

What are the advantages and disadvantages of this diagnostic test?

Advantages: noninvasive, goal-directed, repeatable, rapid, direct information about cardiac structure and function

Disadvantage: training, acceptance, not comprehensive, limitations in coronary and pulmonary anatomy

What are the primary indications?

Cardiac arrest, pericardial effusion, massive pulmonary embolism, assessment of left ventricular function, unexplained hypotension, estimation of central venous pressure