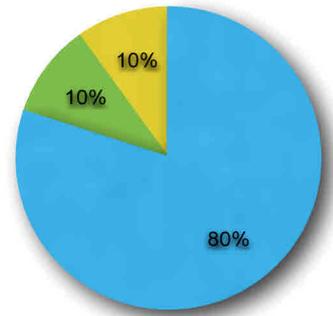


## Cardiovascular Examination

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<br>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 <sup>th</sup> 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

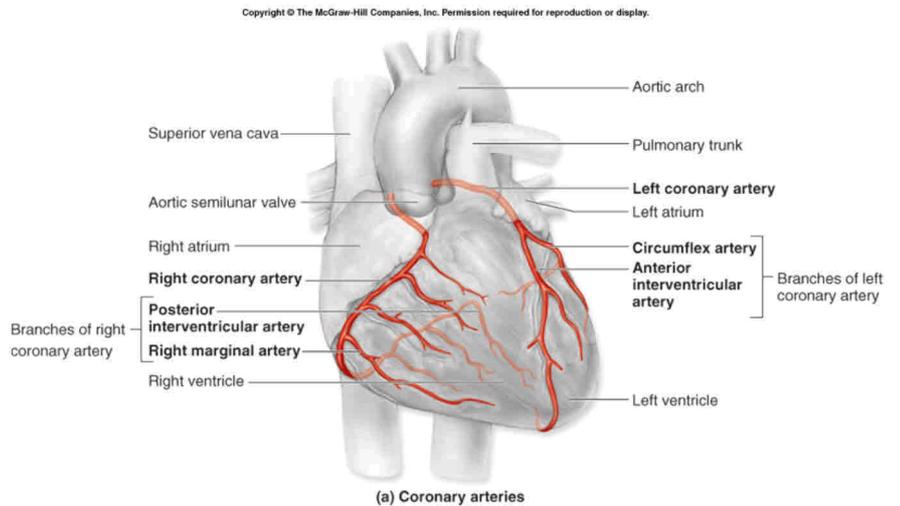
(basic sciences)

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