

Clinical Examination Station 5

9 minutes with up to 1 minute for feedback

Your FY1 who has been in pre-clerking comes to find you. He has been seeing a patient who is due to come in for a Whipples procedure in 2weeks. He thinks that the patients heart sounds are abnormal, and wants you to come and assess the patient. Proceed to perform a full cardiovascular examination on the patient.

Cardiovascular Examination

Performs an appropriate examination of the cardiovascular system

Presents findings coherently and succinctly, commenting on the pulse rate and rhythm, and a detailed description of the heart sounds and murmur (site, sound, volume, timing)

What in the history would you want to know in order to assess fitness for surgery?

- PMH: Angina, MI, etc.
- Risk factors: hypertension, diabetes, smoking, cholesterol
- EXERCISE TOLERANCE

What additional investigations would you request in view of your findings, and who else would you inform?

- Investigations
 - Electrocardiogram
 - Transthoracic echocardiogram
 - Possibly a chest radiograph to exclude failure
- Inform
 - Consultant surgeon responsible
 - Anaesthetist responsible for the list

What are you looking for in an echocardiogram?

- Ejection fraction
- Myocardial dyskinesia
- Valvular function

The echo comes back with reduced ejection fraction, what investigation would you consider next?

- Stress test:
 - Treadmill test

The patient is awaiting a hip replacement and cannot complete the treadmill test – is there any alternative?

- Dobutamine stress test
- Stress MRI
- MIBI scan

The stress test is reported as being positive – what is the next step?

- Will need review by cardiology
- Consideration for revascularisation – e.g. angiography

Overall impression of the candidate Please encircle your mark

FAIL

BORDERLINE FAIL

BORDERLINE PASS

PASS

If you have any specific comments about this candidate please write them in the box.

Extra questions:

Why is the presence of a pacemaker important to the surgeon and anaesthetist?

- Surgeon – diathermy: should ideally use bipolar diathermy if possible. Potential problem with monopolar diathermy:
 - i) disrupt function of pacemaker, inducing arrhythmias
 - ii) can lead to myocardial burns if currents carried through myocardial wires
- Anaesthetist – indicator of underlying cardiovascular disease. Also would want to know when the pacemaker battery and function was last checked.

What is the ‘ASA’ score and what do the scores mean?

- ASA = American Society of Anaesthesiologists score, is a global score that assesses the physical status of patients before surgery.
 - ASA 1 – normal healthy patient
 - ASA 2 – mild systemic disease
 - ASA 3 – severe systemic disease
 - ASA 4 – severe systemic disease which is a constant threat to life
 - ASA 5 – moribund patient who is not expected to survive