

## **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