



Clinical and Procedural Skills Station 2

9 minutes with up to 1 minute for feedback

In this station, the examiner will ask you to perform two procedural skills: hand tying a knot and safely placing and removing a blade from a scalpel handle. Some questions on diathermy will follow

Clinical and Procedural Skills Station 2

Asks the candidate to demonstrate hand tying a knot on the trainer provided.

- Observes the candidate correctly tying a reef knot, demonstrating at least 4 throws

Asks the candidate to demonstrate how they place a blade on a scalpel handle and subsequently to remove this safely.

- Observes the candidate correctly placing a blade using an ARTERY FORCEP, not crossing the sharp edge (so as not to blunt it). Subsequently removes the blade and disposes into a sharps container

How does diathermy work?

- high frequency alternating current between two electrodes generates a large amount of heat which results in tissue destruction/coagulation

What is meant by monopolar and bipolar diathermy?

- Monopolar: a current is passed to a hand held electrode. (The tip of this is where current density is highest, and tissue destruction occurs.) The current dissipates through the patient to the diathermy 'plate'
- Bipolar: current is passed between two electrodes, usually incorporated into a pair of forceps, across a small amount of tissue. No plate is required.

Why does the plate electrode used in monopolar diathermy need to be at least 70cm²?

- The large surface area ensures that the charge/current density at the plate is low which results in minimal heating and prevents burns from occurring.

Why does diathermy not electrocute the patient?

- The frequency of the electrical current is so high 500kHz to 10 MHz

Is it safe to use monopolar diathermy in patients with metalwork, such as hip replacements? If so, what precautions must be made?

- Yes it is safe
- The plate should be placed away from the metalwork though, as current can be induced locally around the metal implants causing local heating and tissue damage.

What is the difference between the cutting and coagulation settings?

- Cutting: continuous current output occurs, leading to temperatures of up to 1000°C, leading to water vaporisation causing tissue disruption without coagulation
- Coagulation: pulsed current output results in sealing of vessels without disruption

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

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