

CLINICAL SKILLS: HOW TO SET UP A BLOOD TRANSFUSION

Please note that this OSCE station requires you to pay a great deal of attention to the patient's details and the details on the blood transfusion bag, and whether the patient has any reactions to the transfusion once it is started. This is because giving a patient the wrong blood can lead to dire consequences, which have to be picked up as early as possible.

Checking the patient

- Wash hands
- Introduce self
- Check with the patient and the patient's wrist band:
 1. Their full name
 2. DOB
 3. Hospital number
- Check with at least two other people that this is the correct patient
- Ask the patient if they agree to having a blood transfusion (you may need to explain why they require a transfusion - e.g. post-operatively, following a bleed, due to bone marrow failure, etc., and explain the risks - see below)
- Expose arm and ensure patient has an in-date cannula with no signs of cellulitis or extra-vasa
- Ensure the patient is sitting comfortably and explain you are going to look at their notes and set up your equipment before you return

Preparation

- Check the patient's notes for:
 - Patient name
 - Date of birth
 - Hospital number
 - Type of blood to be given
 - Blood group
 - Reason for giving blood
 - How many units are required
- Check prescription chart for:
 - Patient name
 - Date of birth
 - Hospital number
 - Type of blood being given
 - How many units are required
- Write the patient's observations in the notes
 - Blood pressure
 - Heart rate
 - Temperature
 - Respiratory rate
 - Oxygen saturations
- Gather equipment (gloves, blood bag, *blood* giving set, and alcohol swab)
 - Inspect the blood bag for any leakage, tearing, or coagulation of the blood itself
 - Check the blood expiry date

- Recheck that the blood being given is the correct blood type, check what type it is and the amount in the bag, and note the bag barcode number
- Check this information against the patient label on the blood bag and also the prescription

With the patient

- Don gloves
- Assemble equipment
 - Use a sterile aseptic technique
 - Ensure that the giving set tube is closed off
 - Remove the lid from the end of the blood bag and from the tube of the giving set, and attach them together
 - Hang bag up
 - Squeeze the bottle on the top of the tube until it is half full
 - In a sink, remove the lid off of the end of the tube
 - Slowly open the tube and allow blood to flow through it
 - Close the tube when the blood just hits its tip
 - Return to the patient. Wipe the patient's cannula port with alcohol wipe
- Insert the end of the catheter into the patient's cannula
- Thank the patient and throw away gloves
- Document that you have started the blood transfusion

Observations

- Now the patient must be monitored for any signs of a transfusion reaction (first 15 minutes, then 30, then every hour), and each time recording:
 - Respiratory rate
 - Pulse rate
 - Temperature
 - Blood pressure
 - Oxygen saturations
- If there is any change in the patient suggesting a transfusion reaction:
 - Stop the transfusion immediately
 - Insert IV saline into cannula site
 - Consider giving other medications such as paracetamol, antihistamine, hydrocortisone, adrenaline
 - Monitor the patient very closely
 - Inform your senior and if necessary contact the on-duty haematologist and send the blood back to the blood bank requesting:
 - Haematology and biochemistry: FBC, Us and Es, LFTs, clotting, antiglobin testing, retesting of AB and Rh types
 - Microbiology: culture blood (in case there is risk of sepsis).