

## Practice Point

### Practice Points for Intravenous Cannulation

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Intravenous cannulation is a very common procedure performed, where essential medications; intravenous fluids and nutrition are administered through a peripheral vein. The procedure for intravenous cannulation is divided into four essential steps;

- Explanation and Consent
- Preparation
- Procedure and
- Aftercare

#### EXPLANATION AND CONSENT

Proper identification of the patient is essential before performing the procedure. The patient's full name, date of birth and hospital identification number needs to be verified.

The procedure and the importance of securing the intravenous line need to be explained to the patient. A brief record of the medical history with a history of needle phobia, any presence of blood clotting disorders or medication that affects blood clotting (e.g. warfarin) needs to be asked. The presence of oedema, recent trauma, any local infection, arterio-venous fistula and a previous history of breast surgery or lymph node removal should not be missed. It may be desirable to ask the patient about the preferred location of the cannula and the presence of a chaperone while the procedure is being performed.

#### PREPARATION

In the treatment room, it is better to have an appropriate equipment trolley loaded with an appropriate aseptic agent, chlorhexidine wipes, a saline-filled syringe and a sharps bin

disposer (side by). Before starting the procedure, the decontamination of hands is required. The expiry dates of the medicines and intravenous fluids need to be checked along with another member of staff. The top of the saline vial (used for dilution), intravenous fluid or the drug ampoule, should be cleaned with the chlorhexidine wipe. All drugs should be drawn up into a sterile syringe. After reconfirmation of the patient's identification, and decontamination of hands, the patient's arm is placed comfortably on a soft pillow.

#### PROCEDURE

A tourniquet is applied over a suitable vein. After application of the tourniquet, do not repalpate the cleaned skin. Mild traction is applied on the skin below the intended puncture site. After this, a cannula is inserted with the bevel up directed at an angle of 30° into the puncture site. The cannula is advanced till a flashback is observed. The needle introducer is held still as the cannula is advanced fully into the vein. After insertion of the cannula, the tourniquet is released and the needle is disposed of into the sharps bin container. The bionector or distal extension of the infusion set is connected to the cannula. The cannula is secured in place with the sterile dressing. It should be ensured that the puncture site is not covered with tape to prevent the development of phlebitis.

The cannula is flushed with 5 ml of saline and no resistance should be felt. Any signs of extravasations around the cannula site should be carefully looked for. In case of any

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extravasations, the cannula should be removed.

**AFTERCARE**

The patient should be instructed to inform the medical or paramedical staff if the cannula site becomes painful, red, hot, or swollen, the area around the cannula feels wet or the

dressings are becoming/getting loose. It should be ensured that the correct cannula insertion documentation is completed. Ideally, the cannula should be checked and flushed 3 times a day and should be removed after 72hr.