

Standard Operating Procedure for IV Cannula Insertion

Purpose: The purpose of this Standard Operating Procedure (SOP) is to provide standardized instructions for correct procedure for inserting an IV cannula.

Responsibilities:

- Ensure proper technique and adherence to infection control measures.
- The person assisting in the procedure is responsible for providing appropriate assistance and maintaining a sterile field.

Equipment and Supplies:

- Sterile gloves
- Alcohol-based hand sanitizer
- Sterile IV cannula
- Sterile IV tubing
- Antiseptic solution (e.g., chlorhexidine or povidone-iodine)
- Sterile gauze
- Transparent dressing
- IV pole or IV stand
- Tape
- Waste disposal bag/container

Procedure:

a. Hand Hygiene:

- Perform hand hygiene using alcohol-based hand sanitizer.
- Put on sterile gloves before touching any sterile equipment.

b. Preparation:

- Select the appropriate gauge of the IV cannula, considering the patient's condition, fluid requirements, and medication administration.
- Assemble all the required equipment on a clean, flat surface.
- Cleanse the insertion site with an antiseptic solution using a scrubbing motion, starting from the insertion site and moving outward in a circular motion.
- Allow the antiseptic solution to dry completely before proceeding.

c. Cannulation:

- Remove the protective cap from the IV cannula and hold it using aseptic technique.
- Using your non-dominant hand, stabilize the patient's vein by pulling the skin taut below the insertion site.
- Insert the IV cannula at a shallow angle (approximately 10-30 degrees) with the bevel facing up.
- Advance the cannula gently into the vein and observe for a flashback of blood in the flashback chamber of the cannula.
- Once blood is observed, lower the cannula to the skin level and advance it further into the vein.
- Release the tourniquet.
- Holding the cannula steady, remove the needle by pulling it straight back, ensuring not to move the cannula.
- Apply gentle pressure at the insertion site with sterile gauze to prevent bleeding.
- Connect the IV tubing to the cannula and secure it with tape.

- Cover the inserted cannula with a transparent dressing, ensuring no air bubbles are present.

d. Waste Disposal and Cleanup:

- Discard all used materials, such as used gloves, gauze, and packaging, into a waste disposal bag/container.
- Perform hand hygiene using alcohol-based hand sanitizer.

Documentation:

- Document the procedure in the patient's medical record, including the date, time, gauge of the cannula, site of insertion, and any complications encountered.