

Standard operating procedure for umbilical line

1. Preparation:

- a. Ensure you have the necessary equipment: gloves, sterile gown, mask, sterile drapes, sterile umbilical line kit (including umbilical catheter, syringe, antiseptic solution, securing device, sterile gauze), and sterile saline.
- b. Check the integrity of the packaging and the expiration date of the umbilical line kit.
- c. Wash your hands thoroughly and put on gloves, a mask, and a sterile gown.

2. Patient setup:

- a. Position the patient in a supine position, with proper lighting and a clean, sterile field.
- b. Expose the umbilical area by folding back any clothing or sheets.

3. Preprocedure:

- a. Explain the procedure to the parent or guardian, ensuring their informed consent.
- b. Assess the umbilicus for infection, inflammation, or abnormalities.

4. Cleaning and draping:

- a. Cleanse the umbilical area using an antiseptic solution with gentle, circular motions, starting from the center and moving outward.
- b. Allow the antiseptic solution to dry completely or according to the manufacturer's recommendations.
- c. Create a sterile field around the umbilical area using sterile drapes.

5. Catheter insertion:

- a. Open the sterile umbilical line kit by following the manufacturer's instructions, ensuring sterility is maintained.
- b. Prepare the umbilical catheter by attaching the syringe and priming it with sterile saline.
- c. Insert the umbilical catheter gently into the umbilical stump at a 30-degree angle. Maintain aseptic technique throughout this step.
- d. Advance the catheter about 4-5 cm from the skin surface or until blood return is observed in the syringe.
- e. Detach the syringe while maintaining catheter position.
- f. Secure the catheter using the provided securing device or sterile adhesive tape, ensuring it is not too tight to impede blood flow.

6. Post-procedure care:

- a. Apply sterile gauze or a transparent dressing over the catheter insertion site to protect it from contamination.
- b. Label the catheter with the insertion date, time, and size.
- c. Document the procedure, including any complications or patient responses, according to institutional guidelines.

7. Ongoing management:

- a. Monitor the umbilical line for signs of infection, dislodgement, or other complications regularly.
- b. Ensure the catheter is not obstructed and can be flushed easily with sterile saline.