

Standard operating procedure for Inserting an intercostal drainage tube

Preparation:

1. Equipment : Sterile intercostal drainage tube, sterile drapes, sterile gloves, scalpel, sutures, local anesthetic, sterile catheters, sterile guidewires, suture removal kit, sterile dressings, and appropriate resuscitation equipment.
2. Explain the procedure and risks to the parents or caregivers and obtain informed consent.
3. Position the newborn in a supine position on an operating table or an infant warmer, ensuring proper lighting and access to the site of chest tube insertion.

Procedure:

1. Thoroughly wash hands and put on sterile gloves.
2. Cleanse the skin over the insertion site with antiseptic solution and apply sterile drapes to create a sterile field.
3. Administer local anesthesia by injecting a small amount of lidocaine subcutaneously at the desired insertion site, typically in the fourth or fifth intercostal space in the mid-axillary line.
4. Make a small incision in the skin using a scalpel to access the pleural space.
5. Insert a sterile finger into the incision to gently separate the muscle layers and reveal the pleural space.
6. Once the pleural space is reached, insert the sterile intercostal drainage tube carefully, ensuring that it is directed towards the apex of the chest to allow for better drainage of fluid or air.
7. Suture the tube in place using non-absorbable sutures, securing it to the skin and preventing accidental dislodgement.
8. Connect the drainage tube to a sterile collection system, ensuring proper functioning and appropriate suction if necessary.
9. Secure the drainage tube and collection system to the newborn's chest using adhesive strips and sterile dressings.
10. Document the procedure, including the size and placement of the drainage tube, any complications encountered, and the newborn's response to the procedure.

Post-procedure:

1. Monitor the newborn closely after the procedure for any signs of complications, such as bleeding, infection, or pneumothorax.
2. Provide appropriate patient care, including pain relief and comfort measures, if needed.
3. Regularly assess the drainage tube site and collection system for proper functioning and signs of infection. Ensure that the sterile dressings are changed regularly.