Precautions for setting up pigtails



Overview

Standard Precautions should be worn by all persons in the patient''s room, and donned prior to opening the chest tube insertion tray.

Key Takeaways

Proper precautions for pigtail catheter insertion include strict sterile technique, correct patient positioning, adequate analgesia, careful landmark identification, and careful guidewire and catheter handling to prevent complications.

Sterile Preparation

Hand hygiene and PPE: All personnel should wear a mask with eye protection, cap, sterile gown, and sterile gloves before opening the insertion tray ( ). Sterile field: Prepare a wide field to prevent contamination and drape appropriately ( ). Skin antisepsis: Clean the insertion site thoroughly with antiseptic solution such as Betadine and allow it to dry before incision ( ).

Patient Positioning and Analgesia

Positioning: For adults, supine with the arm abducted or overhead; for infants, tilt 30–45° with the affected side up using a towel or bean bag ( ). Analgesia: Administer local anesthetic (e.g., 1% lidocaine) to skin, subcutaneous tissue, and pleura. Consider intravenous analgesia or sedation as appropriate ( ).

Antibiotic prophylaxis: Give weight-based cefazolin or equivalent prior to insertion unless emergent ( ).

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Landmark Identification and Needle Insertion

Landmarks: Insert in the 4th–5th intercostal space along the mid-axillary line for adults; for pneumothorax, use the safety triangle bordered by pectoral and latissimus dorsi muscles ( ). Needle technique: Insert the introducer needle over the top of the rib to avoid the neurovascular bundle, advancing gently and aspirating to confirm pleural entry ( ). Caution: Be careful in patients with fractured ribs or adhesions; explore the tract with a gloved finger if necessary ( ).

Guidewire and Catheter Handling

Guidewire insertion: Advance the guidewire gently without resistance; ensure it extends beyond the catheter tip ( ). Dilator use: Dilate the tract over the guidewire carefully to avoid tissue trauma ( ). Catheter placement: Advance the pigtail over the guidewire until all portholes are inside the pleural cavity, then remove the guidewire ( ).

Securing the catheter: Suture the catheter in place and connect to a preassembled drainage system or Heimlich valve as indicated ( ).

Post-

Insertion Precautions

Drainage system: Ensure water seal is at the correct level (typically 3 cm) and check for bubbling to confirm function ( ). Imaging: Obtain a chest X-ray to verify catheter position and lung re-expansion ( ). Dressing: Apply a clear sterile dressing over the insertion site ( ).

Monitoring: Observe for complications such as bleeding, infection, or pneumothorax recurrence ( ).

Special Considerations

Pediatrics: Use appropriately sized Seldinger kits (10–14 Fr) and follow similar sterile and analgesic precautions ( ). Trauma patients: Ensure rapid access to supplies and consider procedural sedation if the patient is stable ( ). Following these precautions ensures safe, effective, and minimally traumatic pigtail catheter placement while reducing the risk of infection, bleeding, or malposition.

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Article Content

Chest Tube (Pigtail) Insertion and Removal | Froedtert & MCW

Standard Precautions should be worn by all persons in the patient''s room, and donned prior to opening the chest tube insertion tray. A field wide enough to prevent contamination, should

What are the considerations and guidelines for performing a pigtail ...

By following these guidelines and using appropriate imaging guidance, pigtail catheter procedures can be performed safely and effectively with minimal complications.

Pigtail catheter chest drain insertion

Positioning: Tilt the baby to 30-45 degrees with the affected side up, using a towel or a bean bag under their back. Sterile preparation: prepare the chest using aseptic technique. The portholes of the

Chest tube insertion – Pigtail | Department of Emergency Medicine ...

Adults: Trauma carts should be stocked with 28Fr, 24Fr, 20Fr standard chest tubes and 14Fr pigtail catheter kits. It is recommended that we discontinue stocking larger sized chest tubes (32Fr, 36Fr)

Wire Guided Pigtail Catheter Placement copy

Step 1: Use lidocaine to make skin wheel and anesthetize underlying SQ tissue and pleura. Apply negative aspiration force and aspirate until bubbles visualized in chamber.

UMEM Educational Pearls

PEARL # 1 – LOCATION/LANDMARK: Minimize skin to pleural distance. Often the region with the least amount of adipose/muscle tissue will be in the 4th to 5th ICS, mid to anterior axillary

Mastering the Percutaneous Pigtail Thoracostomy Catheter

As fluid flow depends on a catheter''s internal diameter and fluid viscosity, pigtails are generally restricted to draining air or thin, free-flowing liquids. In our practice, we do not routinely

Mastering the Percutaneous Pigtail Thoracostomy Catheter

In particular, the upright seated position (similar to the setup for thoracentesis) can be safer and more comfortable in patients who experience respiratory distress when lying flat. In fact, for some cases

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Pigtail Insertion | Emergency Physicians Monthly

As fluid flow is dependent on tube''s internal diameter and fluid viscosity, pigtails have generally been restricted to draining air or thin, free-flowing liquids. Thus, optimal candidates for

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The past few years have served up tons of throwback hairstyle nostalgia. From high ponytails with scrunchies to space buns, we keep looking to

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Learn how to style these 3 QUICK & EASY DIY Instagram Hairstyles with my simplified hair hacks and tips (also how to get perfect curls with a straightener)!

How to Make Pigtail Electrical Wire Connections

How to Make a Pigtail Wire The National Electric Code requires a pigtail wire to be least six inches long. Electricians often cut their own pigtails

How to Do Curly Half-Braided Pigtails (with Pictures)

Curly hair is beautiful enough on its own, but sometimes you need to braid it back to keep it out of the way. This causes most of those beautiful curls

10 Pigtail Hairstyles and Braids for 2022

Pigtails don''t have to look childish. Ahead, 10 pigtail hairstyles and braids that are easy to recreate, super pretty, and celebrity-approved.

wiring pigtails

We provide a detailed guide on wiring pigtails, covering application, advantages, and installation tips. Enhance electronics manufacturing efficiency with wiring pigtails.

Preventing Pigtails when Prepping Panels

Learn how to identify and address the main causes of pigtails, such as abrasive disk loading and improper sanding techniques. Discover best practices for mai...

How to: Perfect high pigtails

Hey everyone! So in this video I will show you how I get "perfect pigtails". They aren''t absolutly perfect, but thats my best! Hope this helps!xoxo Chloe :)

11 Ways to Wear Braided Pigtails That Don''t Look Childish

We''re talking about adult-approved school-age pigtails. While they may seem childish, Instababes across the web have been taking them to a

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