# Distance between pigtail and device insertion removal

## Overview

PURPOSE: To outline the indications and procedure guideline for the insertion and removal of a chest tube (tube thoracostomy) or a pigtail catheter in a trauma patient.

## Key Takeaways

The pigtail catheter should be advanced so that the most proximal black line aligns with the skin insertion site, ensuring proper placement and secure connection to the drainage device.

### Catheter Insertion Distance

During wire-guided pigtail catheter placement, after creating a small skin incision and advancing the dilator over the guide wire, the catheter is advanced into the pleural space. The proximal black line on the catheter should be positioned at the skin insertion site, which serves as a reference for correct depth and ensures that the catheter tip is within the pleural cavity for effective drainage (Froedtert & MCW guidelines, UCSF Medical Center, Hospital Procedures). This alignment prevents over-insertion, which could injure lung tissue, and under-insertion, which could compromise drainage.

### Connection to Drainage Device

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Once the catheter is in place, one end is connected to the drainage system, such as a Heimlich valve or collection chamber. The distance from the skin insertion site to the drainage device is generally determined by the length of the catheter tubing, which should allow enough slack to prevent tension or kinking while maintaining a sterile connection (Hospital Procedures, Froedtert & MCW). The catheter is then sutured at the insertion site to secure it and prevent accidental dislodgement.

### Considerations for Removal

For pigtail catheter removal, the catheter is gently withdrawn along the same tract. The distance to be pulled corresponds to the length of the catheter within the pleural space, ensuring the tip exits the chest without causing trauma. Proper analgesia and sterile technique are essential during removal, and the catheter should be removed completely to the skin level, leaving no portion inside the pleural cavity (Froedtert & MCW, PPNO guidelines).

### Summary

Insertion: Advance catheter until the proximal black line is at the skin insertion site. Connection: Ensure tubing length allows secure, tension-free attachment to the drainage device. Removal: Withdraw catheter fully along the insertion tract to the skin level.

Following these distance guidelines ensures safe, effective drainage and minimizes complications such as tissue injury, kinking, or incomplete removal.

## Article Content

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

PURPOSE: To outline the indications and procedure guideline for the insertion and removal of a chest tube (tube thoracostomy) or a pigtail catheter in a trauma patient.

Chest Tube

Note the marker position on the Chest Tube that covers that distance (deepest insertion point) Last hole on Chest Tube must be in chest or it will need to be replaced

Microsoft Word

Identify the insertion site, which is usually the fourth or fifth intercostal space in the mid-to-anterior axillary line (just lateral to the nipple in males), immediately behind the lateral edge of the pectoralis

Wire Guided Pigtail Catheter Placement copy

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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

Pigtail Insertion | Emergency Physicians Monthly

Pass the pigtail and its trocar over the wire, making sure that the last side hole is within the pleural space. Remove the trocar and guide wire, leaving the pigtail catheter in place, and suture

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

Make a small incision with 11-blade alongside guidewire, then dilate to required depth with dilator, then insert pigtail with obturator over wire to appropriate depth.

Chest Tube Placement and Management Guide | PDF

It discusses the different approaches to chest tube placement including blunt dissection at the bedside, pigtail placement at the bedside under ultrasound guidance, placement by interventional radiology

UMEM Educational Pearls

Advance until the second line on the pigtail catheter, then pull back the obturator part way, and advance the pigtail catheter to the third line. Then completely remove the obturator and guidewire.

Pigtail catheter chest drain insertion

Pigtail placement: introduce the catheter over the wire guide until all the portholes are inside the skin and pleural cavity. NOTE: the wire guide should always extend beyond the catheter tip.

Mastering the Percutaneous Pigtail Thoracostomy Catheter

The goal is to dilate a track in the soft tissue for the passage of the pigtail, and it is often helpful to leave the dilator in for 30 seconds prior to removal to ensure adequate dilation. It is not uncommon to hear

Safety Notice: 019/09

Failure to uncoil a pigtail drain prior to removal can cause severe pain and internal tissue damage to the patient. Clear insertion, management and drain removal procedures, including post referral

Wire Guided Pigtail Catheter Placement copy

Step 6: Remove dilator and advance pigtail catheter over the guide wire Step 7: With dilator removed, advance catheter until most proximal black line is at skin insertion site Step 8: Attach one end of

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Pigtail catheter for pleural drainage: Tips to minimize ...

A guide on using pigtail catheters for pleural drainage, including tips, techniques, and potential complications in emergency medicine.

4.9 Drain Management and Removal – Clinical Procedures for Safer ...

Removal of a drain must be ordered by the prescriber. A drain is usually in place for 24 to 48 hours, and removal depends on the amount of drainage over the previous 24 hours. Drain Removal Checklist 41

The Gear Page

Join a vibrant community of musicians and gear enthusiasts discussing instruments, effects, setups, and more on The Gear Page forum.

Chest tube

Clotting of a smaller diameter chest tube or pigtail catheter by blood (may require low dose TPA to declot pigtails) If pneumothorax persists or large air leak despite well-placed tube need emergent

The Ultimate Guide to Pigtail Cable Assemblies and

Explore the ultimate guide to pigtail cable assemblies and connectors, covering types, applications, pricing, and available options for

Chest Tubes and Pleural Drainage: History and Current Status in

Thoracostomy and chest tube placement are key procedures in treating pleural diseases involving the accumulation of fluids (e.g., malignant effusions, serous fluid, pus, or blood) or air

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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