

Pleural Decompression

Purpose: Decompression of a tension pneumothorax. **This procedure is for PARAMEDIC use only.**

Indications

1. Suspected Tension Pneumothorax

Technique

1. Evaluate and maintain the airway, provide oxygenation and support ventilations.
2. **Decompression procedure:**
 - a. Assemble equipment
 - i. Large bore IV catheter - 16 ga or 14 ga. x 2"
 - ii. Antiseptic swabs
 - iii. Dressing and tape
 - b. Identify landmarks
 - i. Insert needle in the mid-clavicular line at the second intercostal space just above the third rib.
 - c. Prep the area with antiseptic swab
 - d. Remove flash chamber cap from IV catheter.
 - e. Insert the catheter over the top of the rib until air rushes out. Advance catheter over the needle. Remove needle leaving catheter in place.
 - f. Reassess breath sounds and patient's condition (patient's condition should improve almost immediately).
 - g. Secure catheter with tape.

Possible complications of procedure

1. Pneumothorax
2. Hemothorax
3. Vascular Injury

NOTE: ***REMEMBER** to go just above the rib due to all of the major structures (arteries, veins, and nerves) which lie below the rib. The closer you stay to the top of the rib, the less chance of complication.

Pediatric Considerations

1. To perform needle decompression use an 18 or 20 gauge over the needle catheter inserting the needle in the mid-clavicular line at the second intercostal space, just above the third rib.