

NEEDLE THORACOSTOMY/ PLEURAL DECOMPRESSION PROCEDURE

ALWAYS USE STANDARD PRECAUTIONS

INDICATION

- To relieve tension pneumothorax as indicated by a combination of the following:
 - Severe dyspnea and/ or difficulty with ventilation, especially with an intubated patient
 - ALOC and or agitation
 - Absent or unequal breath sounds on affected side
 - Signs of shock
 - Neck vein distention
 - Paradoxical movement of the chest
 - Hyper resonance to percussion on the affected side
 - Tracheal shift away from the affected side

EQUIPMENT

- 14 gauge or larger needle \geq 3 inches
- Heimlich or other one-way valve
- 10 ml syringe

PROCEDURE

- Choose appropriate site on the affected side:
 - If patient head is elevated, locate the second intercostal space, mid-clavicular line
 - If patient is flat, locate the 4th or 5th intercostal space, midaxillary line
- Prepare site with Betadine
- Attach the large gauge IV needle to a large syringe.
- With patient exhaling, introduce the needle at a 90-degree angle, just over the rib at the selected site.
- Advancing slightly superior to the rib, continue until lack of resistance or a “pop” is felt as the needle enters the pleural space.
- If the air and/or blood returns under pressure or is easily aspirated, continue to advance the catheter superiorly and remove the needle.
- When no further air escapes, attach a one-way valve.
- Secure the catheter with the valve in a dependent position.
- Reassess patient