

Checklist: Removal of Pleural Chest Tube

Criteria to be met:

- C.T. drainage < 10 ml/hr x 6 hr pre-removal
- No air leak present
- CCTC physician order/co-signed order to d/c chest tube
- If more than one chest tube in place, double check to confirm the chest tube designated for removal
- Stable respiratory status: RR<24/min; NARD; Bilateral A/E
- Coagulation parameters within normal limits

Supplies:

- Dressing tray
- Jelonet
- Chlorhexidine antiseptic solution
- Suture cutter/scissors
- 4x4 gauze(at least 2)
- Non-sterile gloves
- Hypafix
- Blue pad
- Kelly clamp(s)
- Mask with face shield (should anticipate splash)

Procedure:

- Have someone available to assist. A second pair of hands is needed to apply the dressing and maintain an occlusive seal at the time of tube removal.
- Semi-fowler's position(if patient is able to tolerate)
- Premedicate with analgesic
- Discontinue suction
- Clamp chest tube (the one being removed **and any other tubes that share the same chest drainage unit**).

NB: If only one tube is being removed with a double chamber collection chamber, the drainage tubing to the removed tube must remain clamped following chest tube removal.

- Remove dressing and cleanse site with chlorhexidine
- Remove suture(s) holding chest tube in place
- Take 4X4's with jelonet and place over chest tube removal site, hold dressing firmly in place
- Instruct patient to take a deep breath and hold it (encourage a few practice breaths first, if possible). If patient is ventilated, cycle with ventilator.
- Retract Chest Tube ½ inch to test for resistance. If resistance is met, stop procedure and contact physician.

- In one smooth and rapid motion, remove chest completely, applying direct and immediate pressure.
- Have a second person apply Hypafix tape while maintaining occlusive pressure.
- Tape dressing firmly in place with Hypafix.
- Instruct patient to breathe normally.
- Unclamp remaining chest tubes and resume previous suction. **Keep tubing to removed chest tube clamped if a double chamber drainage collection system is in use.**
- Obtain CXR within 4 hours of removal, or STAT, if signs of respiratory distress, subcutaneous emphysema or bleeding from the site should occur.
- Ensure that physician reviews CXR.
- Document.