

7.06 NEEDLE THORACOSTOMY- EMSAC JULY 2024

INDICATION

TENSION PNEUMOTHORAX: Air leak into pleural space through a hole in lung, acting as a one-way valve.

Assessment confirmed by some of the following:

- Decreased breath sound, uni- or bilaterally
- Tracheal shift away from affected side
- Extreme dyspnea
- Neck vein distension
- Agitation
- Possible cyanosis
- Hypotension
- Hyper resonance to percussion

EQUIPMENT

- #10-gauge angiocath or other appropriate **over-the-catheter-needle**
- **Large syringe**
- **Connecting tubing**
- ~~Heimlich valve or similar one-way valve device~~

LOCATION

- PREFERRED: 4th or 5th intercostal space, **anterior axillary line mid-axillary**, on the affected side.
- ALTERNATE: 2nd intercostal space in the mid-clavicular line on the affected side.

PROCEDURE

1. Introduce either angiocath or other appropriate **over-the-catheter-needle** (~~attached to large syringe~~) just above the rib margin during expiration.
2. Continue until lack of resistance or "pop" as needle enters pleural space.
3. Once air returns under pressure or is aspirated with ease
 - a) ~~Remove plunger.~~
 - b) Listen for air escaping.
4. Once air has ceased escaping
 - a) ~~Remove syringe barrel from needle.~~
 - b) Advance the catheter.
 - c) Secure catheter with needle guard or tape.
 - d) ~~Attach connecting tubing.~~
 - e) ~~Attach one-way valve device or Heimlich valve with **BLUE** end toward patient.~~