Insertion of chest drain

Pneumothorax or pleural fluid requiring drainage

Does this need to be done as an emergency? (e.g. tension)

YES → Insert drain

NO

Is it outside of normal working hours?

YES

Does the patient have significant respiratory compromise?

YES → Insert drain

NO

NO

Prepare patient for chest drainage

Delay procedure until working hours.

Is the drain required for fluid?

YES

Insert drain

NO → Seek senior help

Is the operator experienced?

YES → Insert drain. Ultrasound guidance strongly recommended.

NO

Requirements for insertion of chest drain

- Written consent
- Clean area to perform procedure
- Competent operator or supervisor
- Nursing staff familiar with drain management.

Consider pleural aspiration to relieve symptoms and delay a drain insertion until working hours and when appropriate expertise and/or supervision is available.

Equipment required for chest drain insertion

- 1% lignocaine
- Alcohol based skin cleanser x2 coats
- Sterile drapes, gown, gloves
- Needles, syringes, gauze swabs
- Scalpel, suture (0 or 1-0 silk)
- Chest tube kit
- Closed system drain (including water) and tubing
- Dressing
- Clamp.