

Tension Pneumothorax

A clinical diagnosis that kills in minutes. Do not wait for X-ray. Needle decompression buys time; a chest drain (or referral for one) is the definitive treatment.

1. RECOGNISE (CLINICAL DIAGNOSIS)

- ☐ Severe respiratory distress with falling SpO₂ despite oxygen
- ☐ Absent breath sounds and hyper-resonance on the affected side
- ☐ Distended neck veins; tracheal deviation AWAY from the affected side (late sign)
- ☐ Hypotension and tachycardia from obstructed venous return
- ☐ Do NOT send for X-ray — treat on clinical suspicion

2. NEEDLE DECOMPRESSION

- ☐ Large-bore cannula, 14-16G, the longest available
- ☐ Site: 2nd intercostal space, midclavicular line, affected side
Alternative: 5th intercostal space, midaxillary line
- ☐ Insert just ABOVE the 3rd rib to avoid the vessels under each rib
A hiss of air confirms the diagnosis
- ☐ Remove the needle, leave the cannula open to air, secure it
- ☐ Reassess breathing and circulation immediately

3. AFTER DECOMPRESSION

- ☐ High-flow oxygen 15 L/min
- ☐ Chest drain (5th intercostal space, midaxillary line) if trained and equipped, or urgent referral
- ☐ If tension recurs, repeat decompression with a fresh cannula — the first often blocks or kinks
- ☐ IV access, analgesia, treat other injuries
- ☐ Refer with clear documentation of site, time and response