



NEWBORN EMERGENCY TRANSPORT SERVICE MEDICAL GUIDELINES

CLINICAL GUIDELINES

Pneumothorax
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Newborn Emergency Transport Service Medical Guidelines
King Edward Memorial/Princess Margaret Hospitals
Perth Western Australia
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Pneumothorax

Consider in any ventilated baby or baby on CPAP who acutely deteriorates

Clinical clues:

Increase transcutaneous/ end-tidal CO₂, worsening hypoxaemia, worsening respiratory acidosis, reduced breath sounds on affected side.

Management

- Transillumination with a cold bright light should be attempted, but requires significant darkness, & may be negative in larger babies. A new transilluminator (PediScan 100) is available for use on transports.
- CXR may be available in referring hospital.
- *For emergencies / acute deterioration / bradycardia / hypotension, do not wait for CXR.* Needle chest with 22G or 24G cannula.
- For significantly large / symptomatic pneumothorax, or for air transports, consider insertion of chest drain (pneumothorax is likely to expand with increasing altitude).
- Pigtail catheters & Argyle catheters are both acceptable; attach to Heimlich valve.
- For small pneumothorax/ mild distress, on road transports, consider no treatment (Cot O₂ to improve sats.)
- 100% Nitrogen 'washout' technique is not recommended.
- Transcutaneous or end-tidal CO₂ monitoring should be used in all patients with Air Leaks.
- Fly with Sea Level Cabin & inform the pilot of the need for this.
- Pneumomediastinum rarely requires drainage