

- Less Invasive Surfactant Administration - Summary Clinical Guideline Derby & Burton

Less Invasive Surfactant Administration

Identify eligible baby

Gather equipment
Ensure CXR done if >32/40;
if done more than 2h
ago, transilluminate chest

Prescribe medication (2 doses drawn up)
→ Refer to propofol monograph

Eligibility criteria:

Primary pathology is RDS AND:

- ≥27/40 weeks gestation
- Surfactant deficient lung disease in $FiO_2 \geq 0.3$
- Infant is <72h
- No contraindications

Equipment list

- ☐ LISA checklist
- ☐ LISAcath
- ☐ IV extension
- ☐ Blue 5ml leuer lock syringe
- ☐ Videolaryngoscope
- ☐ Surfactant
- ☐ Environmental comfort measures
- ☐ Consider transwarmer/radiant heater.
- ☐ Suction
- ☐ Intubation equipment (including ventilator)

Complete LISA checklist

Maintain normothermia

Do procedure

1. CPAP must be continued throughout
2. Continuous temperature monitoring
3. Aspirate NGT
4. Give Propofol 0.5mg/kg
5. Visualise cords with videolaryngoscope
6. Insert catheter so cords are at level of black marker
7. Remove laryngoscope from mouth and operator to hold catheter in place
8. Helper gives surfactant slowly over 2- 3 minutes
9. Keep baby's mouth closed throughout
10. Aspirate NGT half way through and at the end of surfactant administration
11. Remove catheter

Contraindications

- $FiO_2 > 0.6$ or pH <7.2
- Clinician feels intubation and ventilation is needed
- Maxillofacial, tracheal, or pulmonary abnormalities such as pulmonary hypoplasia
- Pneumothorax
- Apnoeas or irregular breathing after caffeine load
- Inexperienced staff

Debrief staff, update parents, documentation, ongoing intensive care

Failed procedure: Abandon, or prepare for intubation and ventilation