

Less Invasive Surfactant Administration Workshop

Procedural Walkthrough

Personnel Required

- Nurse
- Respiratory therapist
- Provider X 2

Supplies

- 5 ml syringe
- LISA catheter (16 Gauge Angiocath, 5.5 inch) x1
- Sterile marking pen
- Sterile tape measure
- Laryngoscope size 00/0
- Bag and mask equipment or T-piece resuscitation device
- Sterile gloves and sterile drape.

Step-by-Step Instructions

- Order Poractant alfa (Curosurf) 2.5cc/kg (200mg/kg lipid content) (repeat dose 1.25ml/kg/dose)
- 2. Draw up surfactant in a syringe and 0.5ml air
- 3. Position the infant as for intubation
- 4. Try not to disconnect CPAP. If has to be removed, provide CPAP by mask
- 5. Provider # 1 trained in the LISA procedure will create a sterile field with the drape and drop the catheter and marker pen in the sterile area.
- 6. Provider # 1 will now wear sterile gloves and will open the catheter from the sterile pack and safely throw away the needle.
- 7. Then, using the black end of the sterile marker pen and tape mark the insertion depth:

1 cm for ≤26 week GA 1.5 cm for 27-28 week GA 2 cm for ≥ 29 week GA

- 8. Provider #1, using laryngoscope (or video laryngoscope), will pass the catheter to the insertion depth and hold it in place at the lips
- 9. Provider # 2 will connect the syringe and push surfactant in 4 aliquots over 30 sec-1 min. followed by 0.5cc air.
- 10. Remove catheter and continue CPAP. Improvement in oxygenation will be seen within minutes after surfactant confirming successful administration.
- 11. Provide PPV if infant is having desaturation/bradycardia after instillation.
- 12. Aspirate stomach and check for surfactant reflux

Instructional Video

https://youtu.be/do2fWksTrv4?si=crZA5fbUoc6Nqdat