

SURFSUP Trial: Supraglottic Airway Surfactant Procedure

Equipment List

- T-piece circuit with duckbill port-stored in section S of storeroom
- Size 1 i-gel supraglottic airway
- Lubricant gel
- Syringe and surfactant giving tube (gastric tube or equivalent), cut to 15 cm
- Colorimetric CO₂ detector (e.g. Pedicap)
- Pulse oximeter
- GoPro camera

Pre-Procedure

Ensure preparation for procedure as per Section 8.1 of Trial Protocol, in particular:

- Surfactant prescribed, checked and drawn into syringe with gastric tube
- Equipment for resuscitation, face mask ventilation, and intubation available
- T-piece circuit with duckbill port connected and settings checked (PIP, PEEP, FiO₂) as per clinical team. Patency of port checked with gastric tube
- Oximetry and heart rate monitoring in place
- Aspirate stomach and remove pre-existing gastric tube
- GoPro camera positioned to include infant and monitoring in field of view and recording started

Premedication

- Sucrose PO – for analgesia
- Atropine IV – administer immediately prior to procedure, dose as per unit guidance

Inserting the I-Gel

- Nasal CPAP interface should be left in place throughout the procedure, unless removal is required to secure correct position of i-gel
- Lubricate the back and sides of the i-gel
- Tilt the infant's head back slightly, open the mouth and apply jaw thrust
- Insert the tip of the i-gel along the hard palate with the open side facing the tongue
- Continue inserting the i-gel along the posterior pharyngeal wall. Resistance is felt when the i-gel tip sits on the oesophagus
- The opening of the mask should cover the entrance to the larynx (see next page).
- In some infants, a tongue depressor/laryngoscope may be required to maintain tongue position while inserting the i-gel.
- Confirm correct placement by attaching circuit and Pedicap to i-gel, then remove

Surfactant Administration

- Administer surfactant in small aliquots over 2-3 minutes
- If apnoea, desaturation or bradycardia occur, pause administration and provide stimulation and/or IPPV if required
- On completion and removal of i-gel, ensure nasal CPAP in correct position



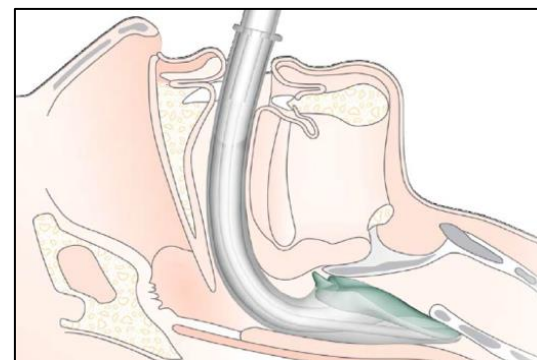
1. Lubricate back and sides of i-gel



2. Insert i-gel along hard palate, over tongue



3. Stop when resistance felt, hold in place



4. Target final position of i-gel over airway



5. Attach Pedicap and circuit to confirm position, adjust if needed



6. Remove Pedicap, insert surfactant giving tube via duckbill port



7. Administer surfactant over 2-3 minutes



8. Remove i-gel, ensuring nasal CPAP in correct position