Nasal CPAP

This is a method of maintaining alveolar recruitment, preventing recurrent collapse and re-expansion and decreasing work of breathing in infants with moderate lung disease

- We use CPAP to support infants in the period soon after extubation and as a primary treatment for mild RDS (see Early Respiratory care section surfactant policy)
- The CPAP level required depends on the work of breathing and the FiO_2 but should generally be 4-7cmH_2O. If the FiO_2 is low, the CPAP level should be low
- With any method of CPAP you are asking the baby to breathe through small tubes which will impose an additional airway resistance. Aim to use the largest calibre of device that will fit comfortably into the nostrils
- It is not kinder to use the smallest size as the chances of failure will be greater

The are four methods of applying CPAP in use in the unit

- Fabian Infant Flow driver (**can also give BIPAP**)
- SLE ventilators
- Argyle prongs
- Nasopharyngeal tube

Infant Flow

- On bench testing, this method is associated with the least work of breathing
- Some small studies suggest that success of extubation may be greatest with this method
- Aim to use this device first if there is a flow-driver available

Argyle Prongs

- Can be used with any of our ventilators as an alternative to a flow driver

Nasopharyngeal prong CPAP

- Occasional infants with airway problems such as Pierre-Robin syndrome need this technique
- Use a soft (green) ET tube placed in the nostril with adequate length to reach the posterior nasopharynx
- The tube tip should not be visible at laryngoscopy
- The tube can be held in place with ties
- Avoid excess tube length outside the nose, as tube resistance is proportional to length
- A nasophayngeal prong can also be used to give nasal IPPV