GASTROSTOMY FEEDING GUIDELINE

Rationale

In order for survival and to optimise outcome, effective nutritional management of the preterm or sick infant is essential (Spence 2000). Some neonates require prolonged tube feeding due to: impairment of normal sucking and swallowing mechanisms; neurological impairment; respiratory and cardiac diseases; oesophageal atresia and short bowel syndrome; oro-facial impairment; and metabolic conditions.

A gastrostomy is defined as a surgical opening through the abdominal wall into the stomach, through which a feeding tube can be passed. The advantage of this route is to enable access to the stomach, bypassing proximal, mechanical, surgical or functional obstructions (Holden et al 1996). The type of gastrostomy tube used will depend on consultant preference, but currently there is a choice of three: Freka; Corpac; and Mickey either a size 12 or 14 Fg.

Practice

Stoma/skin care

- Always wash hands as per infection control policy before commencing administration of a tube feed or administering medicines and wear non-sterile gloves. It is recommended that a non-touch technique be used when assembling equipment and administering a tube feed and administering medicines (Anderton 1995).

- Immediate post-placement care (first 14 days)
  - Treat the entry site as a surgical wound for the first 48 hours
  - Keep clean and dry – clean with sterile normal saline using gauze and dry thoroughly
  - Report excessive discharge and assess likely reasons for this e.g. fungal or bacterial infection, foreign body. Take an appropriate swab prior to cleaning the skin.
  - Apply a thin sterile dressing and change this daily where the tube is secured to prevent the skin becoming sore
• **After 48 hours non-sutured** tubes must be rotated through 360 degrees every 24 hours. Tubes should be pushed in by 5mm, rotated by 360 degrees and gently pulled back to prevent ‘buried bumper syndrome’ (Skipper et al 2003).

• Tubes that are sutured should be rotated following **removal** of the suture

• Long term site care (post 14 days)
  - The skin around the gastrostomy should be kept clean and dry using normasol and gauze. Clean as needed. If there is a flange the ensure the skin underneath is clean and dry.
  - Tubes should be pushed in by 5mm, rotated by 360 degrees and gently pulled back daily (if not sutured).
  - Do not use any topical preparations unless prescribed.
  - The use of a dressing will depend on the infant’s skin condition and will require individual assessment of the infant’s needs.

• Checking the balloon inflation should be done on a **weekly basis** (Community Children’s Nursing Network 2003)
  - Wash hands and put on non-sterile gloves. A non-touch technique should be used.
  - Attach a syringe onto the inflation valve of the balloon gastrostomy and gently draw back the plunger on the syringe until no more water comes out of the balloon.
  - It is advisable to securely hold on to the gastrostomy tube to ensure it remains in the infant’s stomach.
  - Check the recommended volume of the balloon as stated on the inflation valve
  - Using sterile water reinsert recommended volume (4mls) through the inflation valve to re-inflate the balloon.
  - Ensure that the enteral “Y” feeding connector is changed weekly.

• Keep the gastrostomy tube tucked under the infant’s vest to prevent accidental removal.

• If the gastrostomy tube falls out then it should be replaced as soon as possible, preferably within 1-2 hours or the stoma will begin to close

• The manufacturer should provide guidelines for the frequency of and procedure for changing the gastrostomy tube.
Feed administration

- Always wash hands as per infection control policy before commencing administration of a tube feed or administering medicines and wear non-sterile gloves. It is recommended that a non-touch technique be used when assembling equipment and administering a tube feed and administering medicines (Anderton 1995).
- Open the cap on the tube to allow excess air to escape
- Flush the tube with 5 - 10mls of sterile water using a 30ml syringe and record on fluid balance chart. The smaller the syringe, the higher the pressure which may cause damage to the tube (Huband and Trigg 2000)
- Attach a 50 ml syringe to the gastrostomy tube using the gravity feeding set.
- Pour the desired amount of feed into the 50ml syringe and administer by gravity, altering the height of the syringe to control the feed. It is a wide bore tube, so the feed will enter too quickly unless the whole process is controlled. The feed should take between 15 – 20 minutes. The infant should not be left unattended during the feed in case of vomiting with the risk of aspiration.
- Administer 5 - 10mls of sterile water at the end of the feed to prevent tube blockage and record on fluid balance chart
- If the feed is given via a pump draw the desired amount of milk up in a bladder syringe and attach to the feeding set. Change feeding set 6 hourly. Flush the gastrostomy after each feed is completed.

Medicine administration

- Always wash hands as per infection control policy before commencing administration of a tube feed or administering medicines and wear non-sterile gloves. It is recommended that a non-touch technique be used when assembling equipment and administering a tube feed and administering medicines (Anderton 1995).
- Flush the tube with 5 - 10mls of sterile water using a 30ml syringe and record on fluid balance chart
- Slowly administer the medicine(s). If more than one medicine is being administered, flush with 5 – 10ml of water between each medicine
- Administer 5 - 10mls of sterile water at the end of the feed to prevent tube blockage and record on fluid balance chart

**Social and developmental considerations**

- Encourage normal feeding behaviour during the gastrostomy feed. Where possible the infant should be positioned with their head above the level of their stomach, preferably sitting or supported at an angle of approximately 30 degrees (Community Children’s Nursing network 2003)
- Early gastrostomy feeding is associated with hypersensitivity to touch and taste around the infant’s face. A programme should be developed and implemented in conjunction with the speech and language therapist to promote oromotor skills (Holden et al 1996)
- The gastrostomy site is normally healed after 14 days after which the infant can have a bath
- If the infant is going home with the gastrostomy tube, refer to the community children’s nursing team and complete carer’s education programme

This guideline has been produced in conjunction with Morag McCarthy, dietician at the Royal Alexandra’s Children’s Hospital and Trudy Ward, practice educator at Chailey Heritage Clinical Services
References


Skipper et al 2003. Enteral feeding infection control guidelines Infection Control Nurses Association