PROTOCOL FOR NASAL JEJUNAL (NJ) FEEDING

RATIONALE

Nasojejunal (NJ) feeding is the continuous infusion of milk through a silastic tube passed nasally through the stomach into the duodenum or the upper jejunum. The complications of this type of feeding include gut perforation, necrotising enterocolitis and gastric bleeding. In addition there is increased radiological exposure for checking tube position and increased handling of the infant due to the length of time spent sitting and repositioning dislodged tubes (Macdonald et al 1992) NJ feeding does not seem to offer any advantage over continuous gastric feedings and should be reserved for infants at risk of aspiration, such as those with gastrooesophageal reflux or delayed gastric emptying. (Macagno & Demarini 2008)

Indications:

- Infants who are not tolerating gastric feeds.
- Duodenal atresia – post-operatively
- Infants who are at great risk for aspiration, e.g. gastro-oesophageal reflux receiving CPAP. Risk is minimised because the end of the tube is beyond the pyloric sphincter.

Complications:

- Aspiration
- Difficulty with tube placement
- Perforation of the gut
- Malabsorption

Considerations:

- Trans-pyloric feeding may induce symptoms of malabsorption because the stomach is not able to aid in digestion e.g. frequent bowel motion, slow weight gain, necrotising enterocolitis.
PRACTICE

1. The parents should be given the opportunity to meet with medical and nursing staff to discuss the rational for introducing NJ feeding.

2. Place the appropriate sized silastic tube in the freezer for approximately 30 minutes prior to insertion to allow the tube to stiffen to allow an easier passage through the pyloric sphincter. (Medicina SIL 6FR, 8FR or Corflo 5 FR only)

3. The tube should be measured as per gastric tube placement with a further length from the xiphoid to the knee and inserted through the nose as if passing a nasogastric tube the tube should then be made secure.

4. The infant should then be positioned on their right side on a head up tilt. Flush the tube with 0.5ml of water every half hour to allow the passage of the tube through the pyloric sphincter. If the infant is being fed via an NG these may continue whilst the NJ tube passes.

5. The position of the NJ tube needs to be verified by x-ray. Do not aspirate the tube as it will collapse on itself. An x-ray should be carried out 3 – 4 hours after inserting the tube.

6. Once the position of the tip of the tube has been confirmed on x-ray to be in the duodenum/upper jejunum, continuous feeds can be given. Only once the baby is term should there be a break between feeds.

7. The infant will need to be observed for abdominal distension and/or diarrhea which could indicate intolerance to this method of feeding. Gastric bleeding possibly due to increased gastric acid production as a response to milk in the gut should be observed for and treated.

8. When using continuous feeds the syringe should be changed every 2 hours. If using an enteral extension set, this should be left connected to the NJT. Ensure that no milk is
left in the extension set at the end of the feed. Cap the end of the tube when not in use and label with the time and date. The extension set is changed every 12 hours.

9. If using EBM then the syringe and pump should be placed in an upright position. This ensures that the fat will rise to the top of the syringe and be delivered to the baby. Unfortunately some fat will still adhere to the side of the syringe. (Cloherty and Stark 1998)

10. A nasogastric/orogastric tube should be passed and aspirated 6 hourly, if small amounts of clear gastric aspirate are obtained these should be replaced if the volume is greater than the equivalent of 2 ml/kg/hr. If milky aspirate is obtained the NJ tube position needs to be reassessed.

11. Administer medication as prescribed by disconnecting at the junction of the NJ tube and the pump tubing or as per medical staff/ANNPs instruction (be aware of where of where medication is absorbed)

12. The NJ tube should not be left in situ for longer than a three month period. Ensure that the date of insertion is documented.

REFERENCES


http://www.adhb.govt.nz/newborn/guidelines/nutrition/EnteralFeeding.htm#Transpyloric