RE-CYCLING OF STOMA LOSSES VIA A MUCUS FISTULA

INDICATIONS

- Stoma output >30 mL/kg/day term baby (>20 mL/kg/day for preterm baby)
- Discrepancy in proximal and distal bowel calibre
- Inability to absorb increasing enteral feeds
- Failure to thrive
- Developing cholestasis

BENEFITS

- Maximise nutrition for sustained weight gain and decrease in parenteral nutrition
- Stimulation of gut hormones and enzymes
- Increases absorption of water, electrolytes and nutrients by utilising distal bowel
- Digestive tract matures and increases in length and diameter with use
- Adaptation is driven by enteral feed in distal bowel
- Preparation of distal bowel for closure
- Baby can, in some circumstances, be managed at home

CONTRAINDICATIONS

- Diseased or compromised distal bowel
- Rectal bleeding (not absolute but discuss with surgical team)
- Anal stenosis or imperforate anus
- Signs of systemic infection
- Effluent too thick to infuse

ADVERSE REACTIONS

- Bleeding from distal stoma
- Perforation of bowel by catheter (rare)
- Leakage of stoma effluent onto peri-stomal skin may result in excoriation of the skin
- Distress to baby and parent
- Sepsis due to translocation

Before commencing

- **Discuss with surgical team**
- confirm they agree with procedure
- whether distal contrast study is required before re-cycling

Consent

- Explain procedure and potential adverse reactions to parents and obtain verbal consent

Equipment

- Tube (enteral or Foley catheter) size 6 or 8 Fr
- Lubricating gel (if catheter not lubricated)
- Enteral syringe (60 mL)
- Stoma pot to collect stoma effluent
- Extension tubing
- Syringe pump (enteral pump if available)
- Plastic apron and gloves
- Tape and dressing

Documentation

- Record name of surgeon requesting procedure in baby’s notes (when commencing)
- Record condition of peri-stomal skin pre-procedure

Preparation

- Place all necessary equipment at cot side
- Wash hands and put on gloves and apron
- Position baby in supine position and keep warm

PROCEDURE

- Confirm which visible stoma is the mucus fistula – operation note or surgical team
- Pass lubricated catheter into mucus fistula up to 2 cm past end holes
- If using a Foley catheter put only 0.5 mL water into balloon
- Secure catheter to the abdomen with Duoderm®, tape and leave *in situ*
- Cover mucus fistula with paraffin gauze dressing (e.g. Jelonet)
- Collect stoma fluid from acting stoma into enteral syringe, connect to catheter via extension tube and start re-cycling using syringe pump
- Aim to infuse stoma loss over a few hours, but ≤4 hr. Discard any effluent older than 4 hr
- If stoma loss <5 mL, re-cycle by syringe as a slow bolus over a few minutes
- Re-cycling should result in bowel actions per rectum of a consistency thicker than the stoma loss
- If bowel actions per rectum are watery and/or frequent, send samples for culture and sensitivity, virology and detection of fat globules and reducing substances. Discuss with surgical team
- If baby develops signs suggestive of sepsis, stop procedure and perform septic screen as per unit policy. Discuss with surgical team

Preparation for home

- Liaise with neonatal surgical nurse
- Teach parents the procedure
- Order equipment via paediatric community nurse
- Ward will supply 5 days' equipment
- Discharge letter for GP detailing equipment required
- Arrange home visit with clinical nurse specialist in stoma care
- Inform surgical team before discharge