Newborn Critical Care Center (NCCC) Clinical Guidelines

Gastrostomy Tube Guidelines

A gastrostomy tube is a surgically placed tube, inserted through an opening in the stomach. A gastrostomy tube (GT) will benefit an infant who is unable to take in adequate nutrition for growth by mouth. Infants need gastrostomy tubes for a variety of reasons, including extreme prematurity, chronic lung disease, feeding aversion, neurological impairments, and congenital abnormalities. The gastrostomy tube can be temporary or permanent.

CONSIDERATIONS FOR G-TUBE PLACEMENT

1. A trial of full oral/nasogastric (NG) feeds (unless contraindicated) has been conducted. If the patient is close to full oral feeds or the need for tube feedings is felt to be less than 3 to 6 months, consider discharge with home NG feeding.
2. The family has agreed to proceed with the plan for discharge with a gastrostomy (GT) tube.
3. Consult Pediatric Surgery. An upper GI study should be considered for those with long-term feeding problems, previous GI surgery or midline congenital anomaly. Discuss possible need for the UGI with the surgical team at the time of the referral.
4. Pre-op education should begin before the OR. Care Managers have access to this information and provide this for the patients. Parents and providers have access to *the UNC Health Children's Gastrostomy Tube Handbook: Caring for Your Child with a Gastrostomy Tube*, as well as the smaller *Gastrostomy Tube* pamphlet. These will be provided for discharge of all gastrostomy tube patients.
5. Identify the GT medical home. This is the team that will have primary responsibility for the home nutrition plan. Every infant must have a medical home for the GT. This can be the primary pediatrician if they agree, the UNC feeding team, or the complex care team. Pediatric Surgery will continue to follow the patient over time assuring that the infant has the right size tube. Generally, Pediatric Surgery will see infants every 3 to 6 months after post- operative visits are completed. The Care Manager (CM) will assist with ordering the home equipment. These orders should be placed using the Gastrostomy/Jejunostomy Tube Panel in the NCCC Discharge order set. These orders will need to be personalized for each patient.

PRE-OPERATIVE CARE

1. Communicate with the Pediatric Surgery team regarding the date of surgery and contact numbers for the family in order for the team to obtain consent. Let the family know they will also need to provide consent to the Anesthesia team.
2. IV fluids will be ordered by the NCCC primary team the day before surgery. Most patients should be NPO at midnight with IV fluids at 100 – 120 mL/kg/day.
3. The patient requires a pre-op CBC and/or Chem 10, which should be venous samples. Coagulation studies are not routinely warranted.
4. ***Antibiotics are ordered by Pediatric Surgery and need to be ordered on a "sign and hold" basis*** (to be released by the bedside RN when patient is called by the OR) and should be available as the patient goes to the OR. Please consult with Pediatric Surgery about the timing and choice of antibiotics.

POST-OPERATIVE CARE

Epic Orders

1. Vital signs per unit routine for post-op patient
2. Resume other pre-op orders as indicated

Pain

1. Unless contraindicated the infant should receive scheduled Tylenol for the first 24 hours (Initially IV then PO when tolerating 75% feeds).
2. IV Morphine (0.05 mg/kg q 4-6 hrs) should be considered for pain not controlled by Tylenol. Infants may require 1-2 doses of morphine post-operatively

Feeding

1. NPO with GT to straight drainage for the first 6 hours post-op. If stable at 6 hours post-op with normal vital signs for age, start feeds at 50% of goal either continuous or bolus, whichever the infant was previously tolerating.
    a. For bolus feeds, advance as tolerated to 75% with the 3rd bolus feed and to 100% with the 4th feed.
    b. For continuous feeds, start at 50% of goal and advance by 25% every 2 hours to be at full feeds at approximately 12 hours after return from the OR.
2. At times the GT may need to be used immediately for medications that were routine, but missed due to OR. This should be reviewed on an individual basis. All medications should be flushed with 3-5 mLs of water (depending on size of infant). Some medications can obstruct the GT and care must be taken to avoid this complication.
3. If there is abdominal distension, persistent abdominal discomfort, or increasing abdominal girth, discuss with the primary team and consider holding feeds for additional 12 hours.
4. Discontinue IV fluids once full feeds have been achieved.

DISCHARGE PLAN

1. Nursing will complete GT teaching, and the GT teaching checklist. Nursing will secure a “GT emergency bag” for the family to always keep with their infant.
2. Family should be encouraged to stay for some extended time to practice with the GT and their home equipment. Parents must demonstrate proficiency with the equipment prior to discharge. Education regarding home equipment is provided by the home equipment company.
3. The family must be aware of the policy regarding accidental dislodgement of the GT, feel comfortable with the exact steps to take if they have concerns, and know how to contact Pediatric Surgery if dislodgement occurs. *Contact information is listed in the GT brochure.*
4. If the patient is ready to go home prior to POD #5, check to see if the pediatrician is comfortable removing the sutures, or schedule a Pediatric Surgery appointment for suture removal.
5. Schedule routine follow-up appointment with Pediatric Surgery. Contact the Pediatric Surgery NP to determine the timing for follow-up and to schedule the appointment.
6. At discharge, an appointment will also be made with the GT medical home.

7. A plan must be in place for feeding adjustments after discharge. Nutrition visits can be arranged virtually most times with Kelly Brower RD, at the Rex Specialty Clinic. To assist with the timing of these visits, Kelly can be reached by messaging her via Epic. In addition, the NCCC dietician should provide a suggested plan for feeding advancement over the first 2-3 weeks.