

Gastrostomy Tube Care & Pitfalls

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DISCLOSURE

I HAVE NO RELEVANT FINANCIAL RELATIONSHIPS WITH THE MANUFACTURERS(S) OF ANY COMMERCIAL PRODUCTS(S) AND/OR PROVIDER OF COMMERCIAL SERVICES DISCUSSED IN THIS CME ACTIVITY

I DO NOT INTEND TO DISCUSS AN UNAPPROVED/INVESTIGATIVE USE OF A COMMERCIAL PRODUCT/DEVICE IN MY PRESENTATION.

Objectives

- ▶ Review indications for gastrostomy tube placement, types of tubes, and surgical placement of gastrostomy tube.
- ▶ Discuss post-operative management of gastrostomy tubes
- ▶ Discuss principles of home care and parent/caregiver education
- ▶ Identify complications and common problems associated with gastrostomy tubes in pediatric patients and treatment options

What is a g-tube?

- ▶ A tube inserted through the abdomen directly into the stomach
- ▶ Gastrostomy: surgically created opening in the stomach, stoma
- ▶ Tract: channel-like formation between the stomach and skin
- ▶ **BENEFITS OF GASTROSTOMY TUBE**
 - ▶ Nutritional support
 - ▶ Medication administration
 - ▶ Gastric decompression

Who needs a g-tube?

- ▶ INDICATIONS FOR PLACEMENT
 - ▶ Feeding difficulty, abnormal swallow, aspiration, dysphagia
 - ▶ Failure to thrive/poor growth
 - ▶ Inadequate oral caloric intake/high caloric needs
 - ▶ Need for special diet
 - ▶ Medications essential for health
 - ▶ Anti-seizure medications,
 - ▶ Craniofacial abnormalities/facial trauma
- ▶ WHEN ENTERAL FEEDS ARE NEEDED FOR >8-12 weeks; often after trial of NG feeds

Types of G-tubes

- ▶ Gastrostomy tube or button
- ▶ PEG (Percutaneous endoscopic gastrostomy) tube
- ▶ Mallecot or Foley catheter
- ▶ GJ (Gastrojejunal) tube

Balloon Type G-Tube

▶ MIC KEY button



GJ Tubes

- ▶ Allow for gastric or gastrojejunal feedings
- ▶ Fluoro placement after tract well established, >6 weeks post-op
- ▶ Do not recommend daily rotation of tube
- ▶ Require replacement in radiology

G-Tube care

- ▶ Daily care
 - ▶ Gently cleansing with soap and water
 - ▶ Rotate daily
 - ▶ May apply gauze as needed, change when soiled
 - ▶ Assess site daily
 - ▶ Detach all extension tubing outside of feeding

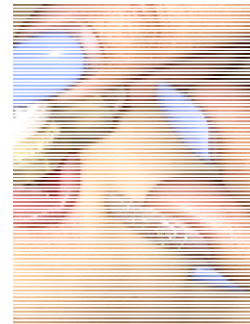
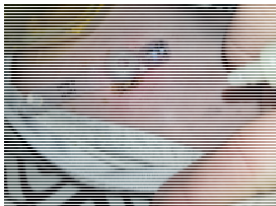
Parent/Caregiver Education

- ▶ **Education** on daily care and common problems they may experience with gtube in place
- ▶ Gtube **workbook** that includes check list and caregiver participation/demosntration
- ▶ Establish **relationship** and encourage communication for troubleshooting

Problems associated with G-Tubes

- ▶ Stoma
 - ▶ Leaking
 - ▶ Bleeding
- ▶ Skin
 - ▶ Granulation tissue
 - ▶ Dermatitis
 - ▶ Irritant
 - ▶ Bacterial
 - ▶ Fungal
- ▶ Tube
 - ▶ Dislodgement
 - ▶ Obstruction

IDENTIFY THE PROBLEM



THE LEAKING G-TUBE

► POSSIBLE CAUSES

- An increase in intra-abdominal pressure: constipation, vomiting, coughing, heavy breathing, ventilation, crying
- Inability to decompress stomach
- Feeding intolerance
- weight change
- Balloon has deflated
- Incorrect size, improper stabilization Tube displacement
- Poor wound healing
- Body structure, ie. scoliosis Underlying disorder, ie. slow motility Positioning

THE LEAKING G-TUBE

► WHAT TO DO ABOUT IT

- Examine site , determine proper fit, check balloon
- Treat granulation tissue if present
- Evaluate feeding schedule and administration
- Ensure proper attachment/detachment of extension tubing
- Check position of tube. Secure if necessary.
- Fill balloon with extra 1 cc water
- Change length of tube if needed. Avoid upsizing stoma/French size.
- Barrier cream to protect skin. Maalox soaked gauze if large volume
- Gauze surrounding tube, wrap along stem
- **Consider removal of tube from tract for brief periods of time if well established to allow for decrease in size of tract, more secure fit.

Granulation Tissue

- ▶ Pink-red, beefy tissue that grows around tube. Secretory. Yellow/brown crusty drainage. Friable, easily bleeds.
- ▶ Causes
 - ▶ Body trying to heal
 - ▶ Incorrect stabilization; tube moving around stoma too freely
 - ▶ Excessive moisture; occlusive dressings

Granulation Tissue

- ▶ TREATMENT
 - ▶ Secure fit and position
 - ▶ Silver nitrate application
 - ▶ Petroleum jelly to surrounding normal skin as protectant prior to application
 - ▶ Apply to granulation tissue daily x 5 days. Can be sent home with parents or provided by RX for home supply
 - ▶ Triamcinolone cream
 - ▶ Apply three times a day up to 2 weeks, then prn
 - ▶ Salt sprinkles
 - ▶ Apply 1/3 tsp daily to tissue x 5 days to create hypertonic environment
 - ▶ GranuLotion OTC

Dermatitis

- ▶ IRRITANT
 - ▶ Symptoms: pink-red, inflamed,
 - ▶ Causes: Leaking of gastric contents, over use of cream/products, ill fitting tube
 - ▶ Treatment: Consider antacid, barrier creams (calmoseptine), trouble shoot leaking
- ▶ BACTERIAL
 - ▶ Symptoms: erythema, gradually spreading, tender, pustules present, discolored drainage
 - ▶ Treatment: Topical mupirocin, oral antibiotic, good hygiene
- ▶ FUNGAL
 - ▶ Symptoms: pink-red, papular, satellite lesions
 - ▶ Treatment: anti fungal cream, keep area clean and DRY

Dislodgement

- ▶ Tract begins to close quickly, **within first hour**.
- ▶ Patient should always have replacement tube at home for emergency use.
- ▶ **<6 WEEKS POST-OP, PRIOR TO FIRST TUBE CHANGE**
 - ▶ Present to ER for replacement with fluoro confirmation
- ▶ **>6 WEEKS POST-OP, ESTABLISHED TRACT**
 - ▶ Replace immediately, at home if possible.
 - ▶ Place foley to maintain tract if unable to replace tube or tube not available
 - ▶ Contact surgery clinic or present to ED for replacement
 - ▶ Aspiration of stomach contents to confirm proper placement
- ▶ GJ TUBE DISLODGEEMENT
 - ▶ Must be replaced in radiology
 - ▶ Mic Key button or foley should be placed in interim to maintain tract

Obstruction

- ▶ Causes: Improper med administration, thick formula, failure to flush, defective tubing
- ▶ Treatment:
 - ▶ Flush with warm water or carbonated water with small syringe
 - ▶ Change extension tubing
 - ▶ May require tube replacement
- ▶ PREVENTION:
 - ▶ Ensure adequate flushing after each med/feed
 - ▶ Use liquid medications
 - ▶ Ensure only water, juice, electrolyte solutions, formula, proper blends given via GTube

QUESTIONS?

Please contact our team with any G-tube questions or concerns. We love to help!

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REFERENCES

[MIC-KEY G Feeding Tube : Your Guide to Proper Care, 2015](#)

[Wesley Children's Hospital: Gastrostomy Tube Booklet](#)