Gastrostomy Tube Care & Pitfalls

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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/demonstration
- 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

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 DISLODGEMENT**
  - 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

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