Care and Feeding of Enteral Tubes

Jeffrey C. Fahl, M.D.
Professor of Pediatrics
Children’s Hospital of New Mexico
University of New Mexico
What is a Gastrostomy?

• An “ostomy” is a connection between an organ and the skin.
• Therefore a “gastro” meaning stomach and “ostomy” is a connection between the stomach and the skin.
• A Tube is needed to keep the ostomy open.
How do you create a Gastrostomy?

- There are two techniques:
  - Surgical
  - PEG
Creating a PEG

• General Anesthesia
• Upper Endoscopy
• Placement of Gastrostomy
• Incision
• Delivery of Guide wire or string
• Attachment of the tube
• Pushing or pulling the tube into place
Jejunostomy Tube

• Usually created surgically
• Principally used to by-pass the stomach because of slow gastric emptying or gastroesophageal reflux that is inoperable or has failed operation
• Uses the same devices as a gastrostomy to keep the connection open
Indications

- Inability to eat
- Aspiration
- Poor oral intake
- Inadequate caloric intake
- May be combined with a fundoplication
Evaluation

• History
  • Growth
  • Cough
  • Emesis

• UGI and/or Swallow Study

• pH probe
Fundoplication
Are Fundoplications always the best answer?

- Relatively high failure rate.
- High complication rate.
- Re-doing the surgery is difficult at best.
- Fundoplications tend to loosen as the child grows.
Gastrosotony Devices

- Catheter Devices
- Button Devices
Catheter Devices

- Foley
- Mallecott
- MIC Tube
- PEG Tube

- Usually the first tube inserted in a new gastrostomy
Button Devices

- MIC-KEY
- Bard
- Genie
- AMT

- Used for long term management.
- Converted or inserted in one to three months
Nourishing G-tubes

• Bolus Feeding
• Continuous Feeding
Bolus Feeding

• Simple
• Fast
• Requires minimal equipment
• Useful for feeding children at school
Problems with Bolus Feeding

- Often precipitates vomiting if delivered too fast.
- Night feeds are not possible, unless the parents want to get up.
Continuous Feedings

- Great for delivering feeds while asleep
- Good for getting around slow gastric emptying
- Great for supplementing daily oral intake
Problems with Continuous Feeds

- Requires more equipment
- Difficult to use at school
- Often makes the children too full to eat a morning meal
So what tube does the patient have?

- Check to end of the tube
- Check the skin level device
Caring for a Gtube

- Daily washing with soap and water
- Rotate the tube while cleaning
- Apply dressing if necessary
- Ointment only if it is inflamed.
Do they ever get infected?

• This is a rare phenomenon
• The puss that you see is more likely to be mucus (Please don’t culture)
• Infections are not superficial.
• Superficial redness is due to moisture or gastric acid
• There is always swelling and tenderness with infection
Granulomas

• Very common.
• Usually associated with increased tube movement
• Granulomas are gastric tissue which has been pulled to the surface by tube movement
• Treatment is best done with silver nitrate and decreasing the tube movement.
Emergency Techniques

• Primary goal is to keep the ostomy open.
• Push the old tube back in or clamp tube. Then tape in place.
• Or - use any object to keep ostomy open.
• Replace with the proper tube as soon as possible. (most families have spares)
• ERs don’t always know what to do.
• When in doubt, put in a Foley catheter!
Summary

- Gtube and PEG are not different in function
- Bolus vs. Continuous Feeds are determined by patient needs
- The type of tube can be determined either by the end of the tube or how it looks at skin level.