GASTROSTOMY CARE AND MANAGEMENT

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OBJECTIVES

1. Identify the various types of gastrostomy devices.
2. Review routine gastrostomy site care.
3. *Discuss trouble shooting techniques for common gastrostomy site problems.*
WHAT IS A GASTROSTOMY?

- Surgically made path (stoma) or opening into stomach from the abdominal wall.
- Gastrostomy goes into the stomach, passes through the muscle and fatty layers and comes out the stoma.
- The stoma forms around gastrostomy in 6-8 weeks.
  - The healing around the gastrostomy is similar to the tract formation after a body piercing.
TYPES OF GASTROSTOMIES

1. Gastrostomy button with BALLOON
2. Gastrostomy button NON-BALLOON
3. Gastrostomy Tubes
GASTROSTOMY BUTTON WITH BALLOON

• Type of g-button that requires inflation of a balloon to keep the button in place
  • The inflated balloon keeps the gastrostomy up against the stomach wall.

• Two Ports
  • Feeding (center) port is for medications and nutrition
  • Balloon (side) port is for water only to inflate the balloon
TYPES OF GASTROSTOMY BUTTONS WITH BALLOON

1. Mic-key
2. Mini one balloon
GASTROSTOMY BUTTON NON-BALLOON TYPES

Two types:

- MiniOne Non-Balloon
- Bard Button

- Secured in place by mushroom-like end
- One port only (Feeding port for medications and nutrition)
- Refer to Pediatric Surgery
GASTROSTOMY TUBE

- These are usually placed temporarily before placing a button in 8 weeks— the time it takes for the gastrostomy tract to heal.
- Usually used on neonates and cardiac patients.
- Will often see with a gastrostomy tube stabilizer in place
  - Needs to be replaced every 5-7 days
- **Will be exchanged to button in Pediatric Surgery clinic**
CARING FOR A GASTROSTOMY

• Cleanse with mild soap and water only. Use Q-tip and gently clean under button daily.

• Keep the area dry! Excessive moisture can cause skin irritation or breakdown.

• Avoid rotating or pulling gastrostomy.

• All attachment tubes should be rinsed out after using with warm soapy water and laid out to dry. Do not place tubes in the dishwasher.

• Only use one piece of dry gauze to catch leaking
CARING FOR A GASTROSTOMY CONTINUED

DO NOT:

- Use alcohol or hydrogen peroxide to clean gastrostomy site
- Apply any lotions, creams, or ointments unless prescribed
- Submerge area under water if gastrostomy surgery is less than 8 weeks
TROUBLESHOOTING

1. Basic complications with gastrostomy tubes
2. What to do if these occur
3. To manage outpatient vs pediatric surgery referral
TROUBLESHOOTING - DISLODgement

• If LESS than 8 weeks since surgical placement

Patient should report to ER to have the device replaced. Do NOT attempt to replace it or stick anything else in its place. The risk of the device not being placed in the proper tract is very high as the tract is not yet stable. Patient has TWO hours to go the ER upon dislodgement as the gastrostomy site will close and surgical intervention will be required.

• If GREATER than 8 weeks since surgical placement

If caregiver is comfortable replacing device (Balloon buttons only) they may do so.
WHAT TO DO WHEN YOUR TUBE IS CLOGGED:

• Warm water is often effective and should be front line treatment.
  • 60mL syringe filled with lukewarm water
  • Do not try to force water in, gently and firmly push and pull the plunger back and forth
  • Clamp the tube for 5-20 minutes allowing the water to “soak” and repeat if necessary.

• If clogging persists, replace for new button
• If clogging persists, refer to pediatric surgery
HOW TO AVOID CLOGGED FEEDING TUBES

• Always flush tube immediately before and after feeding with at least 30mL of water.

• Never mix medication with tube feeding unless advised to do so by healthcare practitioner.

• Flush tube with at least 5mL of water between each medication if more than one is given. Request liquid medications if possible.

• Crush medicine to a fine powder and disperse in 5mL of warm water. Always check with pharmacist first to be sure it is okay to crush a particular medicine.
COMMON CAUSES OF LEAKAGE

What’s the feeding regimen?

- Leaking can be associated with feeding rate being too fast or the volume being too much for the patient to tolerate. Patient should be seen by physician managing nutrition if leaking is not caused by a device malfunction or ruptured balloon.
COMMON CAUSES OF LEAKAGE

Is the gastrostomy button the correct size?

- The button should fit snugly to abdominal wall, but spin freely in a circle using one finger. If the button is too long or too short leaking may occur. Patient should be seen in Pediatric Surgery clinic to be assessed for proper size and fit.

- All tubes are measured in “Fr” or French size. This is a measure of the diameter of the tube itself.

- The “cm” is the length of tube needed to go through the abdomen down into the stomach.
GASTROSTOMY TUBE SIZING

Just Right!

Too Big

Too Small
COMMON CAUSES OF LEAKAGE

Is there enough water in the balloon?

• The balloon in each button should be appropriately filled with sterile water per manufacturer recommendations (okay to use tap water or normal saline if needed).
  
  • How much water to put in balloon:
    
    o 12Fr = 3-5cc
    o 14Fr and up = 5-7cc
COMMON CAUSES OF LEAKAGE CONTINUED

Was the gastrostomy site just created?

- It is expected for new gastrostomy sites to leak. The tract is usually created larger than the device placed, the stoma will shrink down to size.

Is the caregiver venting?

- Remember air takes up space similar to fluid. If the patient is not tolerating feeds and is vomiting or presents with leaking, venting should be recommended.
CAUSES OF LEAKING CONTINUED

Is the button broken?

• Broken Valve
• Formula/medication coming through button itself
OTHER CAUSES FOR IMPROPER FIT

• Has the child gained weight?
  • Weight gain is good! May need longer tube (cm size), refer to pediatric surgery for sizing
  • Never increase diameter (French size)

• Is there granulation tissue present?
  • Granulation tissue can be treated
GRANULATION TISSUE

- An expected part of the healing process
- Forms as a result of friction or excessive moisture to the area
- Tissue is friable and may bleed occasionally
- Treatment may include silver nitrate application, triamcinolone cream, or surgical excision if severe
SITE INFECTION

- Physical Exam: Erythema, purulent drainage, swelling, tender to palpation, indurated
- Fever may be present
- Treatment may include oral antibiotics, topical antibiotic ointment, or I&D (if abscess present)
GRANULATION TISSUE VS INFECTION

• Granulation tissue

• Infection
HOW TO EXCHANGE A GASTROSTOMY TUBE

• Gather all supplies (new g tube kit, lubricating gel, empty syringe, gauze, small towel)
• Fill new syringe with 5cc of sterile water (normal saline or tap is ok)
• Properly lubricate new button
• Deflate balloon of indwelling G button with empty syringe via balloon port
• Remove button with gentle extraction
• Immediately place new lubricated button into stoma with gentle pressure
• Inflate new balloon with 5cc of fresh sterile water
• Dry excess moisture, lubricating gel, or gastric contents around skin
• Connect feeding tube and use large syringe included in kit to aspirate back stomach contents to ensure proper placement.
QUESTIONS:

Medications may be given through the balloon port and feeding port.

True
False

Which of the following is appropriate to use for cleaning the gastrostomy site?

- Peroxide
- Mild soap and water
- Alcohol
- Both a and c

Granulation tissue indicates an infection at the gastrostomy site and care must be sought immediately.

True
False
If the gastrostomy device dislodges less than 8 weeks after surgery, which action is appropriate to instruct the parent/caregiver to perform?

- Call the clinic to schedule an urgent appointment
- Report to the ER within 2 hours
- Replace the button and follow up in clinic
- Both a and c

Is the following an example of granulation tissue or g tube site infection?

How should the above be treated?

- Surgery
- Silver nitrate qdaily x3 days
- Triamcinolone 0.5% TID for 3 weeks
- Antibiotics
References

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