



# Gastrostomy Basics

Gwen Spector RN, BSN, COCN, CGRN



# Assessment

- Skin/stoma

- Look

- Drainage - color, amount
- Redness - uniform, spotty
- Breakdown

- Smell

- Is there an odor?

- Touch

- Warmth
- Tenderness

- Listen

- history/complaints

- Abdomen

- Look:

- distension, skin/scars

- Tube

- Look

- Is it intact?
- Is there leakage?
- Does it fit correctly?
  - Check the device in both supine and sitting positions, make sure fitting correctly

- Smell

- Is there an odor?

- Touch

- Check the balloon volume once a week & when the button looks/feels loose

- Listen



# Build A Barrier

- Purpose:
  - Keeps good moisture in and bad moisture out
  - Protects the skin from caustic fluids
- Products:
  - Powders
  - Creams: Zinc oxide, petrolatum
  - Films: skin prep
- Technique:
  - Put medications on first
  - If using powder put on before barrier creams and sprays
  - Apply creams thick like icing
  - Layer if needed (one time more is better)
  - Don't wipe completely off daily, blot and reapply



**T**reat  
**A**bsorb  
**P**rotect





# Clean

- Skin:
  - Wash the peristomal skin daily and when soiled
  - Use a mild (pH balanced) soap and sterile water
  - Normal saline for infection
  - Submersion in water (when is it ok?)
- Equipment:
  - Feeding extensions:
    - Wash with warm soapy water
    - Flush through with warm water
    - Hang to dry
    - May reuse\* for 2 weeks
  - Rinse feeding bags/syringes after each use and every 24 hours if getting continuous feeds
  - Clean inside of G-button feeding port with Q-tip and water





# Document

- Size of G-tube/button: Fr and cm, placement date, lot no./exp date
- Assessment - be descriptive, clock/measurements
- Site care
- Intervention/Response if applicable
- Feeding time, formula type and tolerance to feeding
- Patient/family teaching - what, how,

\*Ambulatory and Inpatient EPIC Screens differ





# Educate



- Who
  - Every nurses responsibility to teach patient/family
  - Resources Patient Educators, WOC nurses
- When
  - Should begin ASAP
- How
  - Various videos and DVDs on the care of G-buttons are located in the Family Resource Library and with the Clinical Educators.
  - Manufacturer booklets/links to videos are located on





# Flush/Feedings

- Water flushes may be specific to the patient's weight, medical condition and/or diameter of the gastric tube. (GJ tubes require more).
- Standard flushes are 10 cc. If the patient is an infant, on fluid restriction (including getting small volumes of formula) or is getting a lot of medications at one time then 3-5 cc of water can be used instead ).
- Flush with water before and after feeds and medications and ~ every 8 hours if the child is getting a continuous feeding or nothing.
- Syringe feeds should be to gravity, do NOT force to rush the feeds





# Gauze and Other Dressings

- To dress or not to dress, that is the question:
  - When to use:
    - drainage +
    - to fill in depth
    - to hold topical meds in place
  - Change when soiled
  - Shouldn't be too thick
  - Foam dressings are better for heavier







# Home

- Problems should be resolved or at least manageable
- Case management should have supplies/ home care set up
- Patient/family should be able to do care independently
- Follow-up appointments and contact





# Irritation

- Causes:
  - Primarily from leakage of gastric or intestinal contents\*
  - Can also be from harsh cleansers, antibacterial creams/soaps
  - External bolster too tight
  - Sweating/constant moisture
  - Skin disorders - eczema, etc.
  - Some kids just have sensitive skin





# Jejunal Tube/button

- Can be a tube/button in a separate stoma or a tube through the gastrostomy (G-J tube)
- Requires more flush for GJ tube - 30 cc
- Radiology to evaluate and change out GJ tubes/buttons
- Generally formula goes through the jejunal tube and medications through gastric port.
- A balloon keeps the GJ tube/button in place.
- Jejunal fluids are the most caustic





# Know this

- When the original surgery was done
  - Surgical history in EPIC
  - Procedures in EPIC (if done when EPIC started)
  - Ask Provider
  - Ask parent/family
- Type and size of device





# Leakage

- All gastostomies leak some
  - Color:
    - Milky?
    - Purulent?
    - Snotty/Brown?
  - Odor or other symptoms
- Causes:
  - Any increase in intra-abdominal pressure, the **4 C's**:
    - **C**onstipation
    - **C**oughing (also heavy breathing, vent kids)
    - **C**rying, **C**hange in weight or abdominal girth
  - Balloon has deflated
  - Incorrect size, improper stabilization
  - Feeding intolerance/vomiting
  - Nasal/sinus drainage
  - Underlying disorder like slow motility
  - Inability to decompress
  - Excessive torsion on external bolster; Buried bumper syndrome
  - Tube displacement
  - Poor wound healing
  - Positioning
  - Body structure: scoliosis

**\*change length not Fr. size**





# Medications

- Do not give buccal, sublingual, time release, or extended release medications through the G-tube or G-button
- Use liquid medications when possible. If tablets must be used, first crush them into a fine powder and dissolve in 10-20 mL of sterile water (this may be variable depending on number of medications to be given and what is required by pharmacy). Always check with the pharmacist first before administering a medication that is not in a liquid form.
- Don't crush pills that are time released
- Do not put medications into the
- Give medications separately to avoid a possible drug interaction
- Flush the tubing after each medication administration (see Flushing)
- **Give medications through the medication port**
  - For G-tubes, G-buttons with balloons, and G-J tubes, it is important to know which port is the balloon port so that medications are not administered through the incorrect port.





# Notify the Provider

- Abnormalities with the skin
- Problems with the flow of the formula
- Formula intolerance: abdominal pain/  
distension, vomiting
- Gastrostomy device comes out,  
malfunctions or is obstructed
- Patient needs an x-ray ordered





# Obstruction

- **Causes:**
  - inappropriate med administration
  - failure to flush, pill fragments,
  - viscous meds
  - thick formulas
  - defective tubing
- **Prevention**
  - Flush well
  - Liquid med administration
- **Treatment:**
  - Check for kinks, make sure not clamped
  - Attempt to flush with warm sterile water using a 30-60 mL syringe.
  - Use the push-pull method with the syringe to attempt to clear the obstruction
  - Milk the tubing
  - Change out extensions/button







# Protect

- Stretchy gauze
- ACE bandage
- Clothing:
  - Onsie, bathing suit
- Wrap/binder
- Tape (not the first choice for protection but if necessary use a non-irritating tape)



Gus Gear  
[www.gusgear.net](http://www.gusgear.net)  
t  
724-513-4497





# Questions

- What's their normal routine?
  - Skin care
  - Checking the balloon
- Problems?
  - When did they start
  - Anything make it better or worse
  - What else was going on at the same time?





# Rotate

- Rotate non-sutured tubes/buttons daily
  - PEG tube -  $\frac{1}{4}$  turn a day
  - G-buttons (in a mature tract - > 3 weeks post-surgery) - a little more than a full turn a day
- Do Not rotate GJ tubes, surgical G-tubes, primary G-buttons (until tract

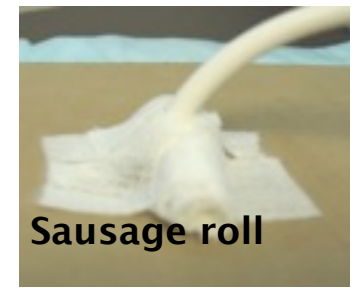


\* Can stretch out stoma

# Stabilize and Secure

- **Extremely important!**
- Goal: keep tube from being pulled and maintain a 90 degree angle
  - Prevents migration of tube and rocking motion
- Some tubes have a stabilization device already: i.e. PEG\* and G-J
- Some tubes need external stabilizer
  - Hollister clamp
  - sausage roll
  - baby nipple
- Don't tape the tube down too tight or lay flat on abdomen- puts tension on the stoma
  - causes enlargement of the stoma

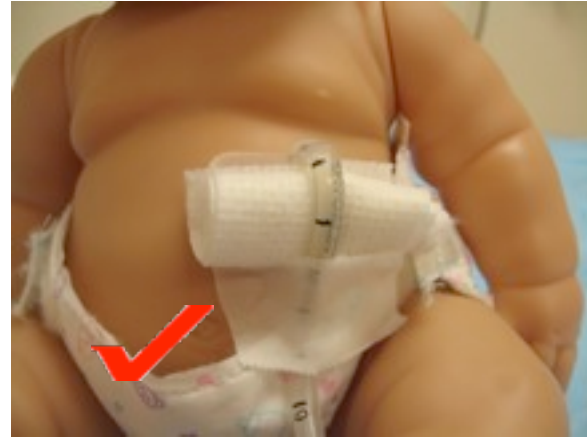
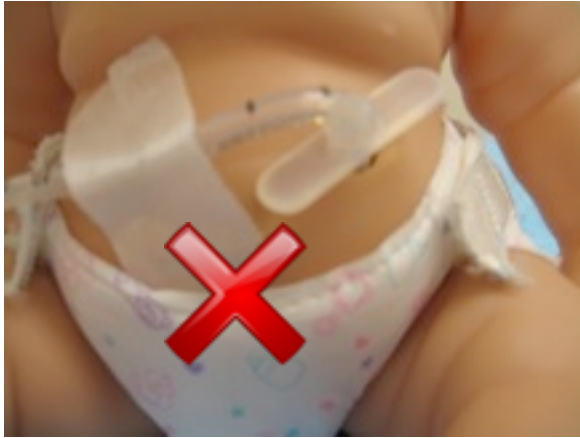
\*PEG tube still needs extra securing to make sure there is no tension on the



External bolster



# Positioning external bolster



Maintain a 90 degree angle



# Tube Malfunction

- Signs:
  - Leaking formula from within the button
  - Balloon leaks/bursts
  - Piece falls off
  - Can't deflate the button
  - Crack or hole on G-tube
- Causes:
  - Wear & tear
  - Meds/formula/gastric pH
  - Residual formula
  - Repeated pulling
- TX:
  - Replace device as soon as possible
  - If the button's balloon bursts, you can put the G-button back in and tape it in place until you can get a replacement. **Don't feed through this as it may migrate.**
  - Balloon port: clean the port
  - For GJ tubes they need replacement under fluoroscopy





# Updates

- Policy
- Competencies
- Home Care Instructions
- Video





# Vent

- You may need to vent the patient's tube to remove excess air or fluid.
  - Open the G-tube port and attach to a drainage device/container.
  - Use a catheter-tip syringe and aspirate the excess air from stomach.
  - Some buttons have specific adapters for decompression
- Farrell Valve® Gastric Pressure Relief Device is recommended to use with continuous feeds.
  - It's designed to help patients who suffer from poor gastric motility, pain and bloating.
  - Recommended for continuous feeds



Farrell Valve







# When to Change

- G-tube
  - Surgical - ~ 8 weeks
  - PEG - 12 weeks
- G-button
  - Malfunctioning
  - Needs new size
- G-J tube





# X-Ray

- Radiological contrast (dye) study or "XR G J check" should be ordered to confirm correct placement of the G-tube/button in these circumstances:
  - If the PEG tube, G-tube, or button is traumatically removed
  - Post first conversion of a surgical G-tube or PEG tube to a button
  - If a surgically placed G-tube or button comes out less than 3 weeks post-operatively
  - For signs of complications post placement such as: no gastric aspirate, abdominal pain, tenderness and/or rigidity





Yuck!!!!





Z-end



# Questions



# Thank you for your attention!

