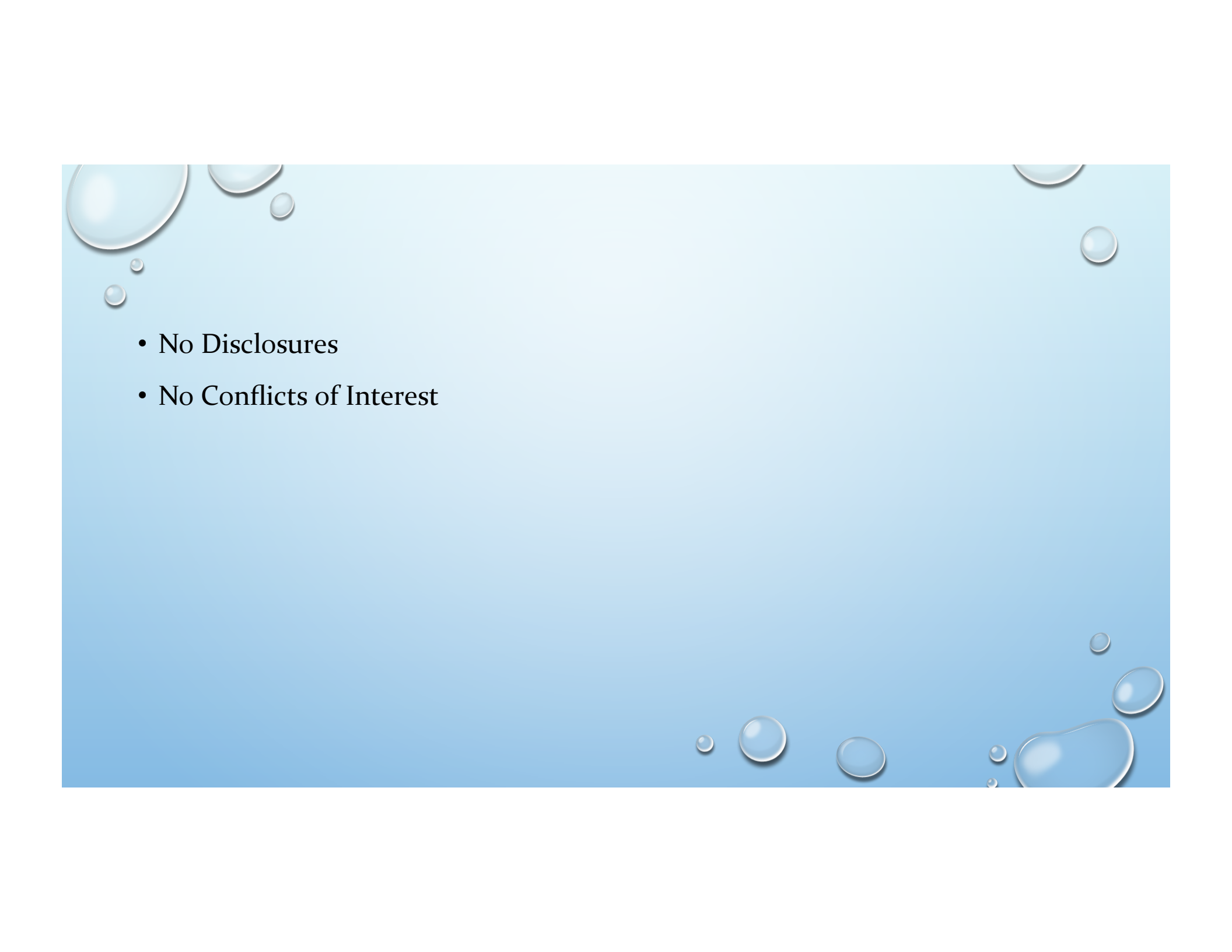


The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance.

Tool Kit For Tube Care

Teri Williard BSN-RN

Pediatric Nurse Wound & Ostomy

- 
- The background is a light blue gradient with several realistic water droplets of various sizes scattered across the top and bottom edges. The droplets have highlights and shadows, giving them a three-dimensional appearance.
- No Disclosures
 - No Conflicts of Interest

OBJECTIVES



- Discuss common complications of gastrostomy tubes
- Skin problems associated with tubes
- Skin Prevention
- Skin Treatment

Complications of Gastrostomy Tubes

- Most minor complications of gastrostomy tubes occur within the first 6 to 12 months of placement. (McSweeney & Smithers, 2016)
- According to a 10 year retrospective study done at Boston Children's Hospital, the incidence of having a minor complication is 15% by 5.4 years. (McSweeney & Smithers, 2016)
- Minor complications lead to frequent
 - Primary Care Visits
 - ER visits
 - Possible Hospital Admissions.



Minor Complications of Enteral Tube

- Tube Dislodgement
- Skin Site Infection
- Leakage
- Stomal Enlargement
- Moisture Associated Skin Damage (MASD)
- Hypergranulation Tissue
- Tube Patency (Clogging)



Minor Complications of Enteral Tube

- Skin problems occur frequently as a result of complications with tubes.
- Daily site care and assessments are key
 - Look at the skin around the tube, at the site, and for proper positioning of the tube.
- If a problem occurs, in order to treat it we have to:
 - Identify It
 - Eliminate It
 - Prevent It

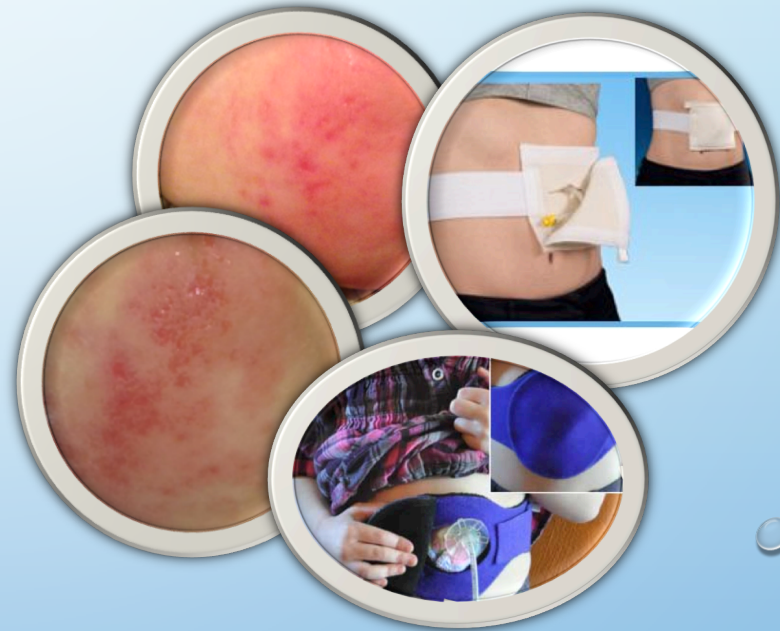
TUBE DISLODGEEMENT

- The stoma site may bleed a little.
- Stomach contents/feeds will leak out of the stoma creating skin irritation
 - Skin around site may be reddened.
 - Look like “diaper rash”
 - Painful
 - Raised/Swollen
 - Itchy
- Stoma site will be irritated and inflamed
- G-Tube/G-Button:
 - Change G-button with in 3 hours
 - If a device falls out within the first 2 months of placement, it will need to be replaced by a medical professional. This is to make sure the tube is in the proper location.
 - J-Tube or G-J Tube is pulled out/dislodged: Cover with gauze/clean dry cloth, Notify your doctors office immediately



SKIN PREVENTION

- Make sure the enteral tube is secured and stabilized with stabilization device or tape.
- If child is prone to grabbing or pulling on tube, be sure to keep it covered with clothing or onesie. Avoid elastic waistbands from directly sitting on G-Tube or G-Button.
- Tubular elastic net or protective belt can be beneficial to keep tube close to the skin.
- Disconnect extension set when feed or medication administration is complete.
- Be mindful of your environment and potential problems it may have.



SKIN SITE INFECTION

- Infection around the gastrostomy site is a common complication
- May be related to underlying conditions, technique related, or care of the gastrostomy.
- Infections are sometimes related to yeast which can be treated with a topical antifungal ointment/cream
- Yeast infections can grow due to moist, warm environment
- If you suspect an infection, please contact your primary health care provider .

(Iyer , K. R., & Crawley, T. C. 2007).

SKIN SITE INFECTION PREVENTION

- Make sure the enteral tube is secured and stabilized with stabilization device or tape
- Ensure proper tension between internal and external bolsters without excessive tension
- Rotate gastric button or gastric tube in tract once daily.
- With daily site care look for
 - Redness, warmth, swelling, abnormal tan drainage, pain and if these are found please contact your primary care provider
- If yeast infection is diagnosed by your doctor, make sure to completely rub in ointment into skin and then apply thick coat of barrier cream to area.



MOISTURE ASSOCIATED SKIN DAMAGE

- Prolonged skin exposure to factors such as gastric contents, urine, stool, sweat, or drainage in combination with irritation which breaks down the skin.
- Contributing factors related to MASD with G or J tubes are:
 - Leakage
 - Stomal Enlargement
 - Hypergranulation Tissue
 - Clogging (Tube Patentcy)
- MASD can cause discomfort, redness, skin loss and potential infection risk.
- The management of unstable G or J tubes that leak effluent around the insertion site become a challenge for all involved.

HOW TO PREVENT LEAKAGE

- Replacing the tube with a larger size does not always fix the problem.
- Tube Stabilization is necessary to prevent:
 - Lateral movement in the tube at skin level – Erosion of Tract
 - Tube migration (in-and-out movements) - Clogged Drain analogy
- Is the tube Clogged?
- Stabilizing ring (if tube has one) is at the skin surface
- Access Balloon Inflation
- Look for Hypergranulation Tissue
- Constipation



(WOCN Society, 2016)

TREATMENT FOR SKIN IRRITATION

- Use a skin protectant/barrier cream to seal the skin.
- Barrier Creams used for the diaper area are used to treat skin around G-Tubes and J-Tubes
- Apply thick layer of skin protectant containing Zinc Oxide to reddened skin.
 - It helps to prevent further skin breakdown and repairs the current skin irritation
 - Remember to “Ice it like a Cake”
 - Place dry split gauze or thin foam dressing under button or tube. Change when wet with effluent.
 - May reapply barrier cream throughout day to affected skin
 - Once daily, remove all Zinc Oxide barrier cream from skin using cleansing foam or warm soapy water. Pat dry, inspect skin, and Reapply thick coat of barrier cream
- May also use small amount of stoma powder to the weeping skin, dab off and apply dry dressing.



CRUSTING TECHNIQUE

If skin is reddened, weeping, and bleeding (aka: denuded) implement the “crusting technique” around the stomal area to affected skin.

1. Apply stoma powder to denuded areas of skin.
2. Brush off excess. Powder will stick to wet/broken down areas.
3. Seal with alcohol free sting free liquid skin protectant.
4. Repeat previous step: apply stoma powder to denuded skin, brush off excess. Powder will stick to denuded areas. Seal with alcohol free sting free skin protectant.
5. Then apply zinc oxide barrier cream liberally over the entire affected area.
6. Once daily remove zinc oxide barrier cream and "crusting" with warm water soaks or by rinsing with a syringe of warmed tap water. Inspect the skin and repeat the process if needed.

Stoma Powder



Alcohol Free
Liquid Skin
Protectant



Zinc Oxide
Barrier Cream



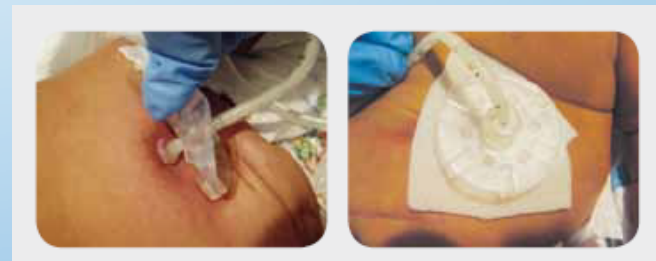
HYPERGRANULATION TISSUE

- Hypergranulation tissue is the moist, red, sponge like tissue which easily bleeds and grows around the enteral tube.
- Caused from poorly secured and stabilized tube, leakage of fluid, use of hydrogen peroxide, and poor fitting G-Button or G-J Button
- Creates a Cycle of Leakage

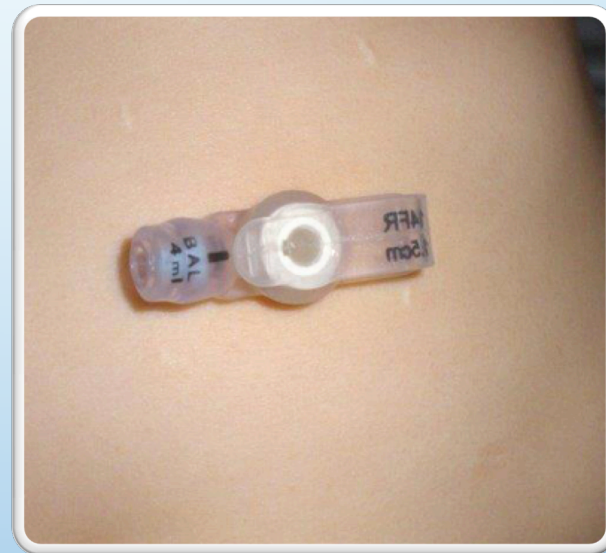


TREATMENT FOR HYPERGRANULATION TISSUE

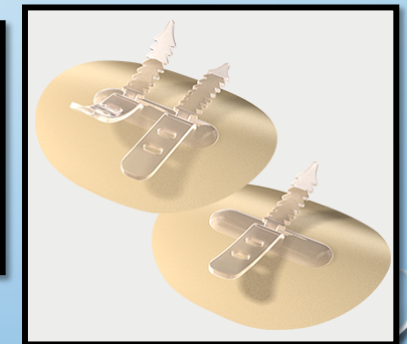
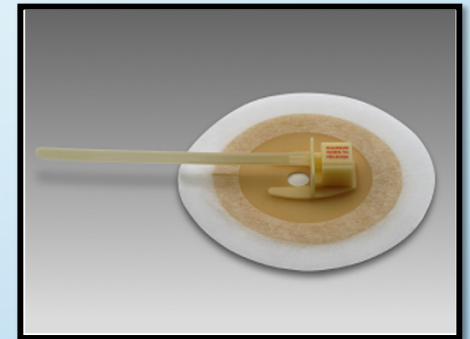
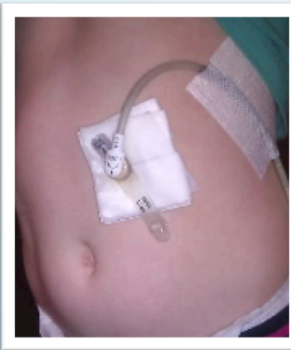
- Stabilize the tube.
- Cleanse site daily with antimicrobial soap and warm water. Keep stomal area dry with split gauze or thin foam dressing
- If hypergranulation is present at enteral stoma site it can be treated by:
 - Placing Foam Dressing around tube. Change when wet/soiled.
 - Topical Steroid Creams prescribed by your doctor
 - Silver Nitrate Cautery



In conclusion, IF you would like to maintain skin at the enteral tube site like this...

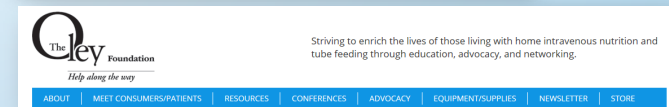
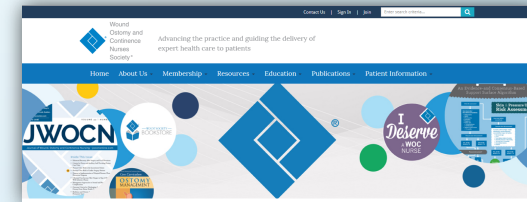


The Key To Success is Prevention and Enteral Tube Stabilization



WHEN IN DOUBT RESOURCE OUT...

- www.wocn.org - Under patient information you can find a local WOCN to assist you with any skin related issues.
- www.facs.org - American College of Surgeons - Key word search “G-Tube” and a “Feeding Tubes” educational booklet available to download/view on G-Tube or G-J Tube care.
- <http://oley.org/> - The “Resources” tab has multiple topics related to skin, feeding, trouble shooting, etc.
- www.byramhealthcare.com - Byram Healthcare is a national disposable medical supply company that delivers directly to patient's homes while conveniently billing insurance plans.
- www.edgepark.com - Edgepark Medical Supplies is a national disposable medical supply company that delivers direct-to-patient and bills insurance plans also.
- www.amazon.com - Has a variety of medical disposable supplies and ointments. Unfortunately cannot be billed to insurance plans.



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