Lisa Samson-Fang: Joining us today is Seraphine Kapsandoy, the Enterostomal Therapy Coordinator at Primary Children’s Medical Center (PCMC). She provides consultation and care for ostomy issues including skin breakdown issues. Seraphine, what are the most common problems?

Seraphine Kapsandoy: When there is leaking at the site, some but not much, the question to ask is if the child sick. If the child is sick, the site may have more leaking. Begin by trying to decompress/vent the tubing by attaching a 60 cc syringe to the feeding port and hold the syringe longer tube to vent for an hour or so. Also, determine where leaking, if the port is leaking, then attach the tubing and call the doctor. If the port is nicked, then the doctor will need to replace it. If the tube is too small for the hole, then call doctor. You don’t want to put a smaller tube inside a larger tube. For regular cleaning, clean the site with mild soap and use diaper cream or Baza Protect cream, which has zinc oxide in it. Also, do not use hydrogen peroxide to clean the site because it kills new cells in addition to bacteria. To check the balloon, deflate the balloon and, depending on age of child, you would usually use 3-5cc of water. Put 4cc of water in the balloon and wait 30 min, then withdraw the water. If the balloon is leaking, you won’t get the full amount of water out and the parent will need to call the doctor to replace it.

Lisa Samson-Fang: Should you put the child on Prilosec or other acid inhibitors helps reduce the irritation to the skin?

Seraphine Kapsandoy: Yes, you can use those acid inhibitors.

Lisa Samson-Fang: How much do parents need to tape down the tube?

Seraphine Kapsandoy: When the site is healing, like a Peg tube, it takes 2-3 months to heal. You should clean the site daily and turn the tube (half turn). When it is healed, then it should be cleaned 1-2 times per week. Don’t get in bathtub until it is healed, usually a few months. When it is healed, the child can bathe or swim. It is always a good idea to secure the PEG tubes and extension tubes in the case of buttons to minimize movement around insertion site, which help prevent granulation tissue.

Lisa Samson-Fang: Are there any activity restrictions after it is healed?

Seraphine Kapsandoy: No, parents are encouraged to have children do normal activities. If the child has a Peg tub, parents can use a belt to secure it.

Lisa Samson-Fang: Should parents use a safety pin and tape to secure the tube?
Seraphine Kapsandoy: No, parents should not use tape and a safety pin due to risk of puncturing the tube and or injuring the child with the pin. Parents can use the chevron method to secure the tube.

Lisa Samson-Fang: What should parents do if they have a child with a new feeding tube, under 2 months, and the child accidentally pulls it out?

Seraphine Kapsandoy: PCMC gives parents an emergency kit after surgery. Parents can use the Foley tube from the kit. For example, if the child has a 16Fr g-tube the parent will use the smaller size foley, in this case 14Fr foley. The parent should measure 2.5 to 3 inches of the tube, lubricate it, insert it, tape it down and bring the child into the Emergency Room. Do not inflate the balloon. The Emergency Room will test to ensure the tube is in the correct place. If the parent does not have an emergency g-tube kit or the required foley, they should try to get to the emergency room or medical facility within an hour, because the site will begin to close.

Lisa Samson-Fang: What should parents do about the breakdown of the skin around the site due to leaking or if the tube is too small?

Seraphine Kapsandoy: Usually skin breakdown is due to leaking, so use Baza Protect to prevent breakdown. If there is breakdown, use normal saline to clean the site. You can make normal saline with ¼ tsp salt with a quart of water. You can also use Critic-aid cream to protect the site. Keep site clean and protected.

Lisa Samson-Fang: What should a parent do if the site has some granulation tissue?

Seraphine Kapsandoy: The parent should do good skin care and then use a steroid cream on the site up to 4 times per day. Usually use the steroid cream for up to 4 weeks and then have the doctor reevaluate the site. If the problem is continuing, the doctor might use silver nitrate once in the office and then have the parents use steroid cream at home. If the problem is more serious, then the doctor would need a consultation to consider cauterization.

Lisa Samson-Fang: What should a parent do if the site has some discharge?

Seraphine Kapsandoy: Infection around the g-tube site is not very common. The parent needs to do good skin care with frequent dressing changes if infection is not suspected. Redness and irritation from leakage may look like infection, especially when stomach contents interact with bacteria on the skin causing a foul-smelling, greenish discharge.
If redness around the site grows when you do not see evidence of leakage, or if redness persists despite your efforts to keep the skin clean and dry, or you notice pus, then call your doctor right away.

**Lisa Samson-Fang:** What should the doctor do if a parent about blood, like coffee ground blood, or bleeding?

**Seraphine Kapsandoy:** The doctor should ask the parent about how much blood there was, when it started, and if it stopped? If there is continuous bleeding, then have the parents bring the child in to see the doctor. Also, the parents can flush the tube to see if there is bleeding. Also the doctor should ask if the child is experiencing other signs and symptoms that may indicate a GI bleeding. The stoma may bleed slightly if the tube is moving too much and irritating the site. Proper positioning and taping should help eliminate this problem.

**Lisa Samson-Fang:** What is done about changing the size as the child grows?

**Seraphine Kapsandoy:** The diameter, or the French/Fr does not change, but size of the length changes as child grows. Parents should bring the child in to consult with doctor.

**Lisa Samson-Fang:** Can the parent change the tube?

**Seraphine Kapsandoy:** If the size goes up 0.2mm in length, then that is fine. Otherwise the doctor would need to use measuring devices to check the size.

**Lisa Samson-Fang:** Does child need to be followed by specialist instead of the primary care physician?

**Seraphine Kapsandoy:** Encourage the doctor to write to for a consult since that is when Seraphine consults. If it is beyond her scope of care, then she will write a consult for a specialist.

**Lisa Samson-Fang:** Can we ask for an outpatient patient consults if child doesn’t need to be in hospital?

**Seraphine Kapsandoy:** No. The consults are for children who are in the hospital. Patients can call her directly, at the Enterostomal Department. Her phone number is 801-662-3691.

**Lisa Samson-Fang:** If the parents want the tube out, does the doctor need a consult for removal of the tube by a surgeon?

It depends on what the surgeon prefers to do. The stomach wall will close on its own. Sewing or suturing it closed will have a better cosmetic effect.

**Lisa Samson-Fang:** How long will it be until the child can eat by mouth once the tube is out and the stomach wall closes by itself?
Seraphine Kapsandoy: The child should wait about 2-3 hours to eat. The stomach wall closes quickly. That is why they teach parents emergency replacement of the tube.

Lisa Samson-Fang: Are there any issues in rural areas from callers?

In Vernal, the supply company brought out new equipment to the family. The training from PCMC helped to know what to do locally when the local hospital did not know what to do.

Lisa Samson-Fang: Do some kids have breaks more often and need more replacements?

Seraphine Kapsandoy: Some kids pull out the tubes. Parents need to distract their child from pulling it out. MIC tubes get pulled out more often. If the child has a MIC tube, parents might consider replacing it with a different type. The other type has a pear shape instead of apple shape, so it might have some issues with leaking in the beginning.

What do you do if the tube dormant for months, about 6 months?

Seraphine Kapsandoy: If it lays dormant for that long, then the question is if it will flush. If it lays dormant for that long, at least a month, then the doctor needs to reevaluate if it should come out because there will be flushing issues, granulation, leakage, and other issue. After a month you would want to check because it isn’t a safe practice to just leave it dormant.

Lisa Samson-Fang: Some kids at Shriners Hospital use them when the get sick. Is it okay to use it that way when they flush tube once daily?

Seraphine Kapsandoy: Yes, because if it is just sitting there and not being flushed, there is no point to have it. If you are going to have it for a long time to use it for replacement feeds or when the child is sick, it is very important to flush the tube at least once daily.

Lisa Samson-Fang: We teach the parents to switch to Pedialite when the child is sick. Many parents don’t think that they can put anything else, other than formula, in the tube when the child is sick, retching, or has diarrhea. Is it part of your education to families to manage the tube when the child is sick?

Seraphine Kapsandoy: Yes, that is part of the teaching. The other thing that happens at PCMC is the question about how much to teach the parent and how much the parent is retaining when the parents leave the hospital after the child’s surgery. We are still a resource to be able to call and ask if they can do something, if it’s okay. It is part of the education. Also, the booklet that they give to parents has information in it.

Is there a standard venting procedure for the Nissen tube? When the child got sick and would dry heave, but couldn’t throw-up, we used a syringe to remove the stomach contents, wait a couple of hours and then start slowly feeding her with
Pedialite. We didn’t know if we were doing the right thing or not. And I hope we were because it was like sludge that we were taking out of her stomach and it would make her feel better immediately. Is there advice that you could give parents that have a Nissen instead of a G-Tube?

Seraphine Kapsandoy: Yes, we teach that children with Nissens do have problems, like barfing. So they need to be vented more when child is sick. So venting with Nissens is very important. I usually say to vent after you feed them. If they start to act a little bit sick, go ahead and vent them. Depending on how active the child is, you may be able to leave tube open to vent, and I would encourage that, rather than just pulling the stomach contents out. Use lots of venting with children with Nissens. And I would absolutely not encourage pulling the stomach contents out.

Lisa Samson-Fang: How can they contact you and is it okay if people call you with questions and concerns that they see in the office?

Seraphine Kapsandoy: It is definitely okay to call me. My number is 801 662-3691. My pager number is 801-194-6156.

Lisa Samson-Fang: And you are available 8 a.m. to 5 p.m. in general.

Seraphine Kapsandoy: Yes, 8 a.m. to 5 p.m. usually in general, Monday through Friday. If I’m not here, my partner is usually here. I am working on a website that should be going up in the near future that people in the community and everyone will be able to access. We are going to post our teaching parents’ guide in there and the videos and everything. So hopefully, it will be a resource.

Lisa Samson-Fang: And you also have expertise in decubiti and how to tape colostomies and other things as well. Do you want to tell us about other areas that people can call you with questions about?

Seraphine Kapsandoy: The most common ones are children with ostomies being able to maintain a secure bag to prevent the stool burns on the skin. And then stomal hygiene especially in premature infants when they go, choosing the right product and teaching the right technique of putting those bags on is another one. Usually with children, they need very flexible, thin wafers versus the adults that you see mostly with the thick wafers, the extended wear that don’t really work that well with children. So, we treat a lot of skin issues due to bag leaks.

Lisa Samson-Fang: And is tracheostomy in your expertise as well?

Seraphine Kapsandoy: When they experience skin breakdown, we are called in.

Lisa Samson-Fang: So, that could be something we could access you if we have a patient with a trach that is having problems with skin?
Seraphine Kapsandoy: Definitely.

Lisa Samson-Fang: Thank you for joining us.

In Attendance: Lisa Samson-Fang, Seraphine C. Kapsandoy, Gina Pola-Money, Barbara Ward, Chuck Norlin, Al Romeo, Budge Clinic, Bear Care, Dr. Terashima, Dinosaurland Vernal, UVP Cherry Tree, UVP Plaza Office.

Additional Information:

Trouble Shooting Common G-tube Problems:
Below is a list of problems that can occur, with possible solutions. If indeed these interventions do not solve the problem, please contact the enterostomal therapy nurse or medical provider.

Leaking at the insertion site:
Leaking at the site can occur for various reasons.

What to do for leakage at insertion site:
➢ Protect the skin: Perform frequent dressing changes.

1. Cleanse the skin around the button with warm soapy water or normal saline, using cotton swabs. Work from the tube outwards, approximately 2 inches.
2. Rinse site with warm water or normal saline, from the button outwards.
3. Dry skin using cotton swabs.
4. Apply barrier cream to site using cotton swabs, such as Baza protect.
5. Place one drain sponge under the outer button. Pull edges of the sponge together and tape across the opening (not on to the skin).

Note: Avoid using hydrogen peroxide to clean the site because it destroys both new cells in addition to bacteria, thus making it difficult for the site to heal.

➢ Ask the following question to try and figure out why the tube is leaking:

- Is the child sick?
  Children with gastroenteritis, pneumonia, ileus etc. have increased pressure in the abdominal cavity, thus forcing gastric contents outwardly. Try to decompress the stomach by venting or burping. If the child has a button, decompression is much harder to accomplish.

- Is the child tolerating feeds?
  Slow down feedings to small feedings more frequently or continuous feeds via a pump vs. bolus feeding.
• Does the balloon need inflation?
  Check the water in the balloon (not all buttons have balloons.) If it is smaller than the recommended amount, inflate the balloon with the appropriate quantity of sterile water.

• Is the child on a ventilator?
  Pulmonary pressure increases gastric pressure, thus causing gastric distention. Try burping the tube, and contact the physician. Perhaps a different tube is needed to better suite the needs of this patient (i.e. one that will facilitate decompression.)

• Is the tube smaller than the enlarged stoma?
  If this occurs, be sure to anchor the tube securely to the skin, preventing movement from within the stoma and leaking of contents.

Remember, with frequent leakage, dressing changes need to be done more often to prevent skin breakdown and excoriation from the acidic contents.

**Granulation Tissue:**
This occurs naturally as the body attempts to close over the stoma opening. This tissue can be reddish or spongy and can bleed easily and contribute to leakage at g-tube insertion site.

**Solutions:**
1. Topically apply 0.1% Triamcinolone cream (prescription). May be used up to four times a day.
2. Or AgNO3 stick applicators (very poisonous-use precautions).
3. Surgically excise after lidocaine injection

**Infection:**
Infection of the stoma or surrounding skin is not very common. At times, redness and irritation from leakage may look like infection when the stomach contents leak and react with the bacteria of the skin creating a foul smelling, green discharge. Thus, prevent excessive leaking and perform frequent dressing changes. If the site still appears red with no evidence of leakage, or there is pus present, contact the physician.

**Bleeding:**
A small amount of bleeding can occur around the stoma during a tube change. Minimal bleeding is not serious, but if large amounts of blood are present, contact the surgeon or gastroenterologist.

**Tube obstruction:**
Most common cause of tube obstruction is secondary to medications. Prevention is the best policy. It is important to flush the tube well after administering medication via the g-tube.
Common Offenders:
– Enzymes
– Biaxin
– Depakote sprinkles
– Calcium carbonate
– Laxatives
– Carafate

Children with Nissen and G-tubes:
Children who have had a Nissen procedure do not burp easily, thus decompression of the stomach is necessary.

- **Method:**
  - Remove the plunger from a 60cc catheter tip empty syringe
  - Attach tip of syringe to G-tube feeding port
  - Unclamp GT and allow air to escape
  - If this does not seem to provide adequate relief, do the following:
    - Attach the syringe with the plunger in it to the feeding port
    - Slowly aspirate or withdraw the air
    - If formula or stomach juices appear, slowly push the food back into the stomach.

  **Note:** *Push only the food and not air back into the stomach.*

G-tube Removal:
- When gastrostomy is no longer medically necessary, site may close spontaneously after device removal or may take up to two weeks to close.
- During this time gastric content leakage can cause skin breakdown.
- Skin must be protected, thus practice good skin care (clean with mild soap and water, apply a skin barrier cream such as Baza protect).
- If site does not close spontaneously or if tube has been in for a long time, closure is done surgically and may involve 1-2 day hospital stay.
It is important to take action right away if the tube from your child’s gastrostomy surgery comes out. Serious problems can occur if the tube is accidentally pulled out before the site is healed. If it is not put back in place within twenty to thirty minutes, the stoma can become very narrow or close up, and reinsertion of the tube can become difficult or hazardous.

**Have your emergency kit ready**

Supplies must always be readily available in case the tube is dislodged. Assemble an emergency kit and take it with your child every time you leave. The kit should include the following:

- Two Foley catheters, one catheter the same size as your child’s current tube and a second tube that is one size smaller
- Catheter plug
- Water-soluble lubrication jelly
- 60-cc catheter-tipped syringe
- 5-cc syringe
- Medical tape
- Gauze dressings (3-inch by 3-inch and 4-inch by 4-inch)
- Sterile or distilled water

**What should you do if the tube comes out before the site has healed?**

A surgical gastrostomy site takes about three weeks to heal. A PEG placement heals in about two months. If the tube becomes dislodged before the gastrostomy site has healed, follow these steps immediately:

1. Wash your hands thoroughly with soap and water.
2. Have someone help you by holding your child’s hands.
3. Lubricate the smaller-sized Foley catheter with a water-soluble lubricant and gently insert it about 2 to 3 inches into the opening. Never force the tube into the stomach.
4. Tape the tube in place.

5. Call the physician who placed the tube immediately for instructions on what to do next. Your doctor may want you to take your child for an x-ray to make sure the tube is in the proper place.

   **Physician**
   Phone number

   If you need to contact the doctor on call, use the following phone numbers:

   **Surgeon** .................................. 801.662.2950
   **Gastroenterologist** .............. 801.662.2900
   **Radiologist** .......................... 801.662.1801

   After office hours, call the hospital operator at 801.662.1000, and ask for the doctor on call.

   **When can you start using the tube again?**
   Do not use the tube for feeding until its position is checked according to the doctor’s directions.

   **What are the complications?**
   Occasionally, reinsertion of the tube may push the stomach away from the abdominal wall, allowing the tube to enter the abdominal cavity. This creates a dangerous situation in which stomach contents can leak into the cavity. Your doctor will look for that when he examines your child.

   **What should you do if the tube comes out after the site has healed?**
   After your child’s gastrostomy site has healed, it is still important to act promptly, before the stoma begins to close. The booklet that you receive will contain instruction on how to replace the tube.

   **How can you prevent this from happening?**
   - Always remember: know where the end of the tube is before you move your child.
   - The best way to guard against dislodging the tube is to keep it taped securely to the skin at all times, especially during feedings.
   - Get help holding your child for dressing changes during the initial weeks after the tube is placed.
   - Make sure you have an emergency kit with the child at all times.