

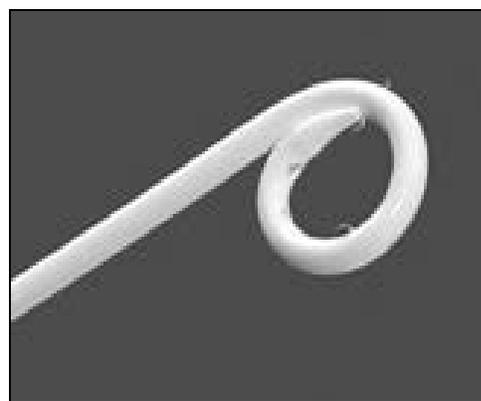
## Angiography: Percutaneous Gastrostomy

*What to expect when you have a “G-tube”*

*This handout explains a percutaneous gastrostomy tube and what to expect when you have one.*

### What is a percutaneous gastrostomy?

A *gastrostomy* is a procedure to insert a small plastic tube (*catheter*) called a “G-tube” through the skin of your upper abdomen and into your stomach or intestines. *Percutaneous* means “through the skin.”



*The end of the gastrostomy tube that sits in your stomach.*

### What does a G-tube do?

A G-tube allows us to give you nutrition. It also lets us drain your stomach if your intestines are blocked. There are 2 types of G-tubes:

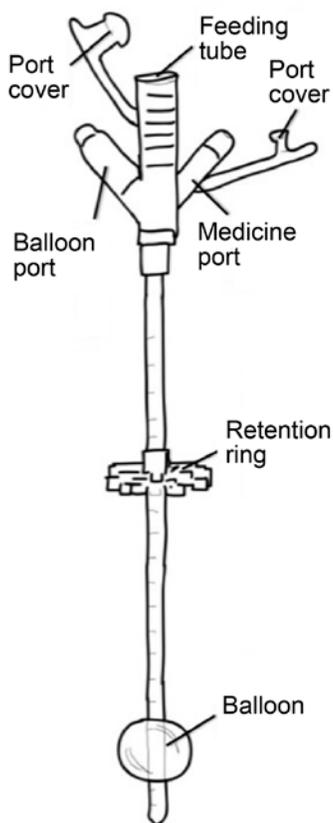
- With a regular G-tube, the end of the tube sits in your stomach.
- A *gastrojejunostomy* tube is a longer G-tube. The tube enters your stomach and the tip is in your small intestine. This tube has 2 hubs on the end of the catheter for you to infuse fluids. (See drawing on page 2.)

Your G-tube will stay in place until you no longer need it. G-tubes are easily removed. While they are in place, they may need to be changed to keep them from getting clogged.

### How is a G-tube placed?

There are 3 ways to place a G-tube:

- A surgeon can place the tube in the operating room.
- A doctor who specializes in digestive diseases can place the tube. This doctor uses a scope that goes from the mouth down into the stomach (*percutaneous endoscopic gastrostomy* or PEG tube).



A gastrojejunostomy tube

- An *interventional radiologist*, a doctor who specializes in procedures done with X-ray guidance, can place the tube. **Your doctor believes having the radiologist place your G-tube is the safest and most effective way for you.**

## Are G-tubes safe?

Overall, gastrostomy tubes are very safe. Most times, the intended benefits far outweigh the risks.

Minor problems after G-tube placement are fairly common. They include:

- The G-tube may get clogged. Most clogged catheters can be fixed. Sometimes, the tube needs to be replaced.
- The G-tube may come out, either partly or all the way. If it comes partway out, do **not** use it until your doctor tells you it is OK to use.
- An infection may occur where the G-tube enters your skin. Most site infections can be treated with antibiotics. Sometimes, other treatment is needed.

The most serious problems from this procedure are:

- **Bleeding:** Major bleeding is rare.
- **Peritonitis:** *Peritonitis* is an inflammation of the membrane that lines the inside of the abdomen and all of the internal organs. This is a serious problem and must be treated right away.

Your doctor will explain your health risks from having a G-tube placed. Please ask any questions you have and make sure all of your concerns are addressed.

## Before Your Procedure

- **Interpreter services.** If you do not understand English well enough to understand these instructions or the details of the procedure, tell us right away. We will arrange for a hospital interpreter to help you. This service is free. **A family member or friend may not interpret for you.**
- **Blood tests.** You most likely will need blood work done sometime in the 30 days before your procedure. We might do this when you arrive for your procedure. We will let you know if we need a blood sample before that day.
- **Liquid contrast (Omnipaque):** On the day before your procedure, we will ask you to drink liquid *contrast* (X-ray dye). Contrast will highlight your colon so that we can clearly see it with X-rays. (See “Day Before Your Procedure” on page 4.) You must pick the contrast up at the UWMC Radiology front desk at least 1 day before your procedure.

- **Blood-thinning medicines.** If you take any blood thinners such as Lovenox, Coumadin, or Plavix, you may need to stop taking the medicine before the procedure for 2 to 7 days. The length of time depends on which medicine you are taking. If you have not been told what to do, contact your primary doctor or the clinic that prescribes your medicine for instructions.

**IMPORTANT:** If you have ever had a heart stent, a prosthetic heart valve, a pulmonary embolism, or atrial fibrillation with a history of a stroke, it is **very** important to contact the provider who writes your blood-thinning medicine. Tell this provider you are having a G-tube placed and ask if you need to stop taking your medicines before the procedure.

- **Diabetes medicines.** If you have diabetes and take insulin or an oral diabetes medicine, we will give you instructions about holding or adjusting your dose before your procedure.

## Sedation

When the G-tube is placed, you may be given a *sedative* (medicine to help you relax) through an *intravenous* (IV) tube. You will stay awake, but feel sleepy. This is called *conscious sedation*. You will still be sleepy for a while after the procedure.

Conscious sedation may not a safe option for you if you have certain health conditions. Tell us **right away** if you:

- Have needed anesthesia for basic procedures in the past
- Have *sleep apnea* or chronic breathing problems (you might use a CPAP or BiPAP device while sleeping)
- Use high doses of opioid medicines to relieve pain
- Have severe heart, lung, or kidney disease
- Cannot lie flat for at least 1 hour because of back or breathing problems
- Have a hard time lying still during medical procedures
- Weigh more than 300 pounds (136 kilograms)

Talk with the providers in Radiology about the type of sedation that will be used for your procedure. You may receive:

- Conscious sedation, as described above
- Only a local *anesthetic* (numbing medicine), such as lidocaine
- A local anesthetic and a single pain or anxiety medicine (*minimal sedation*)
- *General anesthesia* (medicine to make you sleep), given by an *anesthesiologist*

## Day Before Your Procedure

- The day before your procedure, you may eat as usual.
- Plan for a responsible adult to drive you home after your procedure and stay with you the rest of the day. **You may NOT drive yourself home or take a bus, taxi, or shuttle alone.** If you need to take a bus, taxi, or shuttle, the responsible adult must ride with you.
- **At 9 pm., drink the full bottle of contrast (Omnipaque) that we gave you.**
- **Do not eat or drink anything after midnight.**

## Day of Your Procedure

### At Home

- Do not eat or drink anything. This includes mints or chewing gum.
- Bring with you a list of all the medicines you take.
- Plan to spend most of the day in the hospital. If there is a delay in getting your procedure started, it is usually because we need to treat other people with unexpected and urgent problems. Thank you for your patience if this occurs.

### At the Hospital

- Check in at Admitting on the 3rd floor (main level) of the hospital. Admitting is near the lobby, to the right and behind the Information Desk.
- We may have also told you to go to the **Outpatient Lab** for a blood draw. The lab is behind the Cascade elevators, next to Outpatient Pharmacy. You can go to the lab either before or after you check in at Admitting.
- After checking in and having your blood drawn, take the Pacific elevators to the 2nd floor. Check in at the Radiology reception desk.
- A staff member will:
  - Take you to a pre-procedure area
  - Give you a hospital gown to put on
  - Give you a bag for your belongings.
- While you are in the pre-procedure area:
  - Your family or a friend can be with you.
  - A nurse will ask you some health questions, take your vital signs (such as heart rate), place an IV tube in your arm, and explain what to expect.

- A radiologist or physician assistant will talk with you about the procedure. They will ask you to sign a consent form, if you have not already signed one.
- You will be able to ask any questions you have.
- You may want to use the bathroom at this time.

## **Your Procedure**

- The nurse will take you to the Radiology suite. This nurse will be with you for the entire procedure.
- You will lie on your back on a flat exam table.
- We will use these devices to monitor you during the procedure:
  - Wires on your chest will help us watch your heart
  - A cuff around your arm will let us check your blood pressure
  - Oxygen prongs in your nose will provide oxygen and a probe on one of your fingers will show us how well you are breathing the oxygen
- Before the procedure begins, an X-ray will be taken to see if the contrast you drank the day before has reached your colon. **If it has not, we may have to delay your procedure.**

**Important: If the X-ray shows that your colon or liver blocks our way into your stomach,** the procedure will be cancelled. Your gastrostomy will need to be done a different way.

- Next, the entire medical team will ask you to confirm your name and your allergies. They will then talk about the procedure. This review is done for your safety. It is done for every patient before every procedure.
- A radiology technologist will clean your skin around your abdomen with a special soap. The technologist may need to shave some hair in the area where the doctor will be working.
- Next, your nurse will start giving you medicine to make you feel drowsy and relaxed.
- To do this procedure, we need to fill your stomach with air:
  - A tube will be placed through your nose and down to your stomach. This step is uncomfortable but it should not be painful.
  - You may briefly feel that you need to vomit, but that feeling will go away after the tube passes through your throat.
  - You may feel bloated when the air is injected.
- We will take X-rays during the procedure to help your doctor see exactly where to place the G-tube.

- If needed, an interpreter will be in the room or will be able to talk with you and hear you through an intercom.
- The radiologist will inject a local *anesthetic* (numbing medicine) into your skin under your rib cage. It will sting for about 10 to 15 seconds, but then that area will be numb. After that, you should only feel pressure, but no pain.
- Next, the radiologist will insert several metal clips into your stomach to pull it to the surface. The G-tube is then inserted. The tube will be held in place with a plastic disk.
- The procedure takes about 30 minutes.

### **After Your Procedure**

- We will watch you closely for a short time in the Radiology department as you wake up. You will then be moved to a short-stay unit in the hospital. Nurses will monitor you there for 4 hours.
- A member of the Radiology team will examine your abdomen 4 hours after the G-tube is placed. After that exam, you can start to use the tube.
- Before you leave the hospital, your nurse will tell you what activities you can do, how to take care of your tube, and other important instructions.

### **When You Get Home**

- You may have some mild pain and redness where the G-tube comes out of your skin. If the pain, tenderness, or redness gets worse or pus comes out, call us **right away**.
- Resume taking your medicines as soon as you start to eat. Take **only** the medicines that your doctor prescribed or approved, and in the approved form.

### **About Your Gastrostomy Tube**

- Do **not** use the tube until your doctor tells you that it is safe.
- Follow the instructions we gave you for infusing fluids. The tube is more likely to clog if the *infusate* (the liquid) is too thick. Be sure to crush pills as you were shown.
- If you get sudden belly pain while infusing fluids, **stop the infusion right away** and call us.
- Flush the tube 2 times a day with  $\frac{1}{3}$  ounce (10 ml) of water. Flush again after all feedings and medicines.

- For 48 hours, keep the tube site dry. After that, you may shower.
- For 4 weeks, do not take a bath, sit in a hot tub, or go swimming.
- Use a Q-tip to gently clean under the plastic disk. Keep the area clean and dry. Cover it with a soft bandage.
- It should take about 2 weeks for the area to heal. When it has healed, you no longer need to cover it with a bandage.
- **IMPORTANT:** The *sutures* (stitches) on the metal clips must be cut 10 to 14 days after the procedure. **There is a serious risk of infection if this is not done at the right time.** If you do not yet have an appointment for this, call us at one of the phone numbers below.

## When to Call

Call us **right away** if:

- There is bleeding from or around the tube
- You have a fever higher than 101°F (38.3°C) or chills
- You have abdominal pain that is worse when food is given through the G-tube
- Your G-tube falls out or seems to be partway out
- You are vomiting
- Your G-tube:
  - Is blocked
  - Falls out
  - Pulls back more than 1 to 2 inches

## Who to Call

UWMC Radiology Patient Care Coordinator .....206.598.6897

Procedure scheduling .....206.598.6209

After hours (between 5 p.m. and 7 a.m.), and on weekends and holidays

*Ask for the Interventional Radiology Fellow on call* ..... 206.598.6190

## Urgent Care

**If you need urgent care, go to the nearest Emergency Room or call 911 right away.** Do not wait to talk with one of our staff.

### Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

UWMC Imaging Services:  
206.598.6200