What is a percutaneous nephrostomy tube?
A percutaneous nephrostomy tube is a small, soft plastic tube that drains urine from the kidney. The tube starts at your kidney and comes out the side of your lower back. You may need this tube placed if you have a blockage that prevents urine from draining out of the kidney. The tube relieves pressure from urine that has backed up into the kidney.

You will need to spend the night in the hospital after you have the tube placed. A nephrostomy tube needs to be changed every 10-12 weeks to make sure the tube keeps draining well. Tube changes are done as an outpatient.

How is a nephrostomy tube placed?
To place the tube, we use:
- Ultrasound—creates pictures of your organs using sound waves.
- Fluoroscopy—an exam of your organs using x-rays.

Before the tube is placed, a radiologist will explain what is going to happen. After your questions are answered, we will ask you to fill out a consent form. Please tell the doctor if you have any allergies to contrast dye, antibiotics, anesthetic (numbing) agents, latex, or any other medicines.

We will place an IV will in your hand. We will then give you medicines for pain and to help you relax. You will also get IV antibiotics.

Using ultrasound and fluoroscopy, the doctor will decide where to place the tube. After marking this area, we will clean the skin. We will place a sterile drape over your back and legs. The doctors will put on sterile gowns and wear masks.

We will inject a local numbing agent into the skin of your lower back. The area will be numb so you won’t feel the needle go in. You will begin to get medicine in your IV to relieve the pain and help relax you. Most patients do not feel much pain, but you may feel pressure during the placement.

Once the area is numb, the doctor will put a small needle into the kidney through the skin of your lower back. When it is in place, the doctor will inject a small amount of x-ray dye to see your kidney and urinary system. The doctor will then replace the needle with a soft tube that stays in the kidney.
One end of the tube will remain outside your body to drain urine into a bag. The doctor will secure the tube at the skin surface with a stitch. You will also have a 2 x 2 gauze under and on top of the tube. You will have a 4 x 4 Tegaderm® dressing placed over the gauze. The procedure will take 1-2 hrs.

After the Procedure
1. You will return to a hospital room.
2. The nursing staff will be checking your vital signs such as pulse, blood pressure and temperature.
3. Nurses will watch how your tube is working. They will check the amount and color of your urine. **Your urine may appear blood tinged, this is normal. It will clear up over time.**
4. Tell the nursing staff if you have:
   - Nausea
   - Vomiting
   - Fever
   - Chills
   - Severe pain where the tube goes in
   - **Problems breathing**

Steps to Clean the Tube and Change the Dressing
The tube site must remain clean to prevent an infection at the site. If using Tegaderm®, change the dressing **every 3 days**. (If your skin is too sensitive for Tegaderm® then you can use a 4 x 4 or 2 x 2 sterile gauze with tape). If using 4 x 4 or 2 x 2 sterile gauze, change the dressing once a day.

**Supplies**
- 4 x 4 Tegaderm®
- 2 x 2 sterile gauze
- Mild soap (ie: Dove®)
- Blue caps for flushing the tube

**Steps**
1. Gather all supplies needed.
2. Wash hands well with soap and water for 30 seconds.
3. Remove the old dressing.
4. Check the tube site for:
   - Increased tenderness or pain
   - Increased redness or swelling
   - Drainage that is green or smelly – small amount of green drainage is normal
   - Sutures at the skin site that are loose
5. Using a clean wash cloth, clean the skin around the tube site with soap and water. Gently scrub the skin. Rinse with wet wash cloth. Wipe dry. Allow the area to dry before putting the dressing on.
6. Place the Tegaderm® dressing or sterile 2 x 2 gauze under the tubing and then place the other 2 x 2 gauze over the tube insertion site.
7. Tape down the nephrostomy tube at the level of your hip. This helps prevent the tube from being dislodged.
If Your Nephrostomy Tube Connects to a Drainage Bag

If your tube connects to a drainage bag, urine will drain into the bag. If your other kidney is working, you will urinate the normal way. Do not be alarmed if you urinate less or not at all.

The tubing and drainage bag will be changed when you come to the hospital for a routine change. You may need to change these before your visit if the bag or tubing has a foul odor or a lot of build up inside.

Supplies

- Urine leg bags
- Nephrostomy extension tubing (CTU-30)

Steps

1. Gather all supplies needed.
2. Wash your hands well with soap and water for 30 seconds.
3. Connect the new urine leg bag to the tubing.
4. Unscrew the clear tubing from the nephrostomy tube in your back.
5. Discard the old tubing and bag.
6. Connect the new tubing and bag by screwing the clear extension tubing back onto the nephrostomy tube.

If Your Nephrostomy Tube Is Clamped

No urine will drain from the tube if it is clamped off. There will be no drainage bag on your tube. Urine made by your kidney will drain through the ureters and down into your bladder and will leave your body when you urinate. See Health Facts for You #5721, Flushing Your Drain.

When to Call

- Redness at the site
- Greenish drainage at the site
- Swelling at the site
- Fever greater than 100.5° F for two readings taken 4 hours apart
- Shaking, chills
- Foul-smelling urine
- Decreased urine output from your drainage bag
- Cloudy urine with a sediment
- Pain at your tube site
- Pain in your side
- Your stitches come out or break

Who to Call

Radiology Department, Monday through Friday, 8:00 am to 4:30 pm at (608) 263-9729, option #3.

After hours call (608) 262-2122. This will give you the paging operator. Ask for the interventional radiologist on call. Give your name and phone number with the area code. The doctor will call you back. The toll-free number is: 1-800-323-8942.

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.