Percutaneous Abdominal or Pelvic Drain

What to expect

This handout explains what percutaneous abdominal or pelvic drain is and what to expect when you have one.

What is a percutaneous drain?

Your doctor has asked us to place a *drain* (small plastic tube) into your body through your skin (*percutaneous*). An *interventional radiologist* will insert your drain. This is a doctor or physician assistant with special training doing procedures that are guided by imaging such as X-rays, CT scans, or ultrasound. Placing the drain with this method is much safer and involves less recovery time than regular surgery.

Why do I need a drain?

Drains are placed for many different reasons. Some of the more common reasons are:

- *Abscess*: A large infection in the body. It requires strong antibiotics **and** removing the pus.
- *Leaks*: Fluid from the bowel, pancreas, bile ducts, or the urinary tract may need to be drained to allow leaks to heal.
- *Infected hematomas*: Infected buildup of blood under the skin.
- *Nephrostomy*: Drainage of the urinary system may be needed if there is a blockage. It may also need draining to help treat kidney stones.
- *Biliary drain*: If the bile ducts are blocked, they must be drained to prevent infection or liver damage.

Are there any risks to having the drain placed?

Placing a percutaneous drain is usually a very safe procedure, and the benefits far outweigh the risks. But, unexpected events can occur. The most common complications are:

- Bleeding (if a blood vessel is accidentally punctured)
- Blood infection (if bacteria get into the blood stream)
- Skin infection (if the catheter stays in a long time)
- Injury to a nerve or vital organ (such as the bowel)

Your doctor will talk with you about your risks. Please be sure that all of your questions and concerns are addressed.

How long will I need the drain?

How long the drain must stay in place depends on where it is placed and what problem it is treating. Sometimes, drains must stay in for weeks or months. We will not keep the drain in place any longer than it needs to be.

Over time, drains can get clogged. If your drain needs to be in place for many months, it will need to be replaced about every 2 to 3 months.

Before Your Procedure

- If you are an outpatient, a nurse coordinator will call you the afternoon before your procedure. If your procedure is on a Monday, the nurse will call you the Friday before. The nurse will give you final instructions and answer any questions you have.
- If you do not understand English well enough to understand these instructions or the details of the procedure, tell us as soon as possible. We will arrange for a hospital interpreter to assist you. **A family member or friend may not interpret for you.**
- You most likely will need blood tests done within 14 days of your procedure. Sometimes, we do this when you arrive for your procedure. We will let you know if a blood sample is needed before that day.
- If you take any blood-thinning medicines (such as Coumadin, Lovenox, Fragmin, or Plavix), you may need to stop taking the medicine for 3 to 9 days before the procedure. You will receive instructions about this.
- If you have diabetes and take insulin or metformin (Glucophage), you will receive instructions about holding or adjusting your dose for the day of your procedure.

Sedation

- When your percutaneous drain is placed, you will be given a sedative medicine (similar to Valium and morphine) through your IV. This medicine will make you sleepy, help you relax, and lessen your discomfort. You will stay awake. This is called *conscious sedation*. You will still be sleepy for a while after the procedure.
- For some people, using conscious sedation is not safe. If this is true for you, you will need *anesthesia* (medicine to make you sleep during the procedure).

  Let us know **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 narcotic painkiller
  - Have severe heart, lung, or kidney disease
  - Cannot lie flat for about 1 hour because of back or breathing problems
  - Have a hard time lying still during medical procedures
  - Weigh more than 300 pounds (136 kilograms)

Day Before Your Procedure

To prepare for sedation, follow these instructions closely:

- The day before your procedure, you may eat as usual.
- Starting **6 hours** before your procedure, you may only have *clear liquids* (liquid you can see through such as water, Sprite, cranberry juice, or weak tea).
- Starting **2 hours** before your procedure:
  - Take **nothing** at all by mouth.
  - If you must take medicines, take them with **only** a sip of water.
  - Do not take vitamins or other supplements. They can upset an empty stomach.
- You **must** have a responsible adult drive you home and stay with you the rest of the day. **You may NOT drive yourself home or take a bus, taxi, or shuttle.**

On the Day of Your Procedure

- Take all of your other usual medicines on the day of the procedure. Do **not** skip them unless your doctor or nurse tells you to.

- Bring a list of all the medicines you take with you.
- Please 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.
- Unless you are told otherwise:
  - **If you are a patient at University of Washington Medical Center** (UWMC), check in at Admitting on the 3rd (main) floor of the hospital. Admitting is to the right and behind the Information Desk in the lobby.
  - **If you are a patient at Harborview Medical Center** (HMC), check in at the Ambulatory Procedure Area (APA) on the 8th floor of the Maleng Building.
- A medical assistant will give you a hospital gown to put on and a bag for your belongings. You may use the restroom at that time.
- A staff member will take you to a pre-procedure area. There, a nurse will do a health assessment. Your family or friend can be with you there.
- An IV line will be started. You will be given fluids and medicines through the IV.
- An interventional radiology doctor will talk with you about the procedure and ask you to sign a consent form if that has not already been done. You will be able to ask questions at that 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 a flat table that allows the doctor to see into your body with X-rays.
- Wires will be placed on your body to help us monitor your heart rate.
- You will have a cuff around your arm. It will inflate from time to time to check your blood pressure.
- A radiology technologist will clean your skin around the area of the procedure with a special soap. Tell this person if you have any allergies. The technologist may need to shave some hair in the area where the doctor will be working.
- The entire medical team will ask you to confirm your name and will tell you what we plan to do. This is for your safety.

- Then, your nurse will give you medicine to make you feel drowsy and relaxed before we begin.
- If needed, an interpreter will be in the room or will be able to talk with you and hear you through an intercom.
- Your doctor will apply a local *anesthetic* (numbing medicine) to the place where the tube will come out of the skin. The anesthetic burns for about 5 to 10 seconds, but then the area will be numb. After that, you should only feel pressure, not sharp pain.
- Your doctor will then guide a needle to the area where the drain will be placed. The needle is then replaced with a plastic drain tube about ¼ inch wide. The tube is held on your skin with stitches.
- The entire procedure usually takes about 1 to 2 hours.

After Your Procedure

- We will watch you closely for a short time in the Radiology department.
- If you are an outpatient, you will then go to another unit in the hospital. A nurse on that unit will monitor you.
- You will most likely be able to eat and drink, and your family may visit you.
- If you are an outpatient, you will be able to leave the hospital when you are fully awake, able to eat, use the restroom and walk.
- Problems after this procedure are rare. If they occur, we may need to keep you in the hospital so that we can keep watching you or treat you.
- Before you leave the hospital, your nurse will tell you what activities you can do, how to take care of your catheter, and other important instructions.

When You Get Home

- Relax at home for the rest of the day. Make sure you have a family member, friend, or caregiver to help you. You may feel drowsy or have some short-term memory loss.
- For 24 hours, do **not**:
  - Drive a car or use machinery
  - Drink alcohol
  - Make important personal decisions or sign legal documents
  - Be responsible for the care of another person
- You may shower or take a bath 24 hours after your procedure.

- There is usually only minor pain after interventional radiology procedures. If your doctor says it is OK for you to take acetaminophen (Tylenol), this should ease any discomfort you have. If your doctor expects you to have more severe pain, you will receive a prescription for a stronger pain medicine. Call us if the pain cannot be controlled with your prescribed medicines.
- Resume taking your medicines as soon as you start to eat. Take **only** the medicines that your doctors prescribed or approved.

When to Call

Call us **right away** if:

- You have severe bleeding or there is new blood in the drainage fluid
- You have a fever higher than 101°F (38.3°C) or chills
- You are vomiting
- There are leaks around the catheter
- Your drain comes out or moves
- Drainage stops suddenly, after days of a lot of drainage

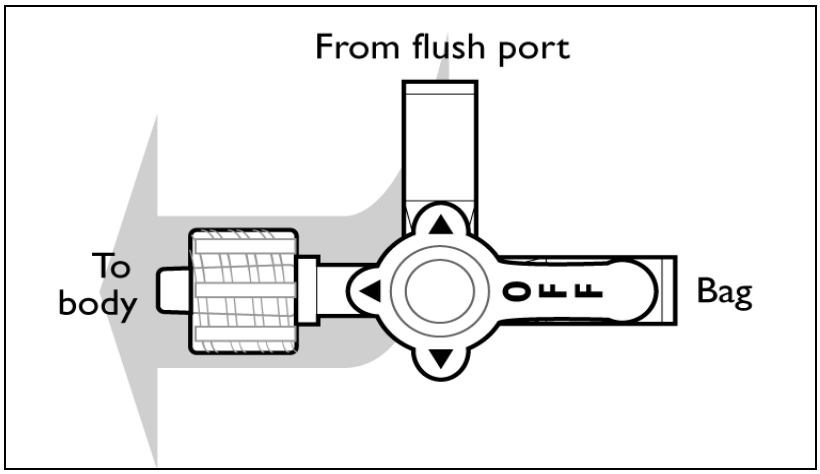
Caring for Your Drain

- Every time you empty the drainage bag, record the amount of fluid you collected. The drainage bags have markings in milliliters (ml). Estimate the total amount. **Record your output every day.** When you come for drain evaluations, bring your written record.
- Call us when the drainage output is less than about 10 ml a day for 2 to 3 days in a row. You **may** be ready for the drain to be removed.
- Many drains must be flushed daily to keep them from clogging. Your doctor will tell you if your drain needs to be flushed and how often.
- If your drain has a 3-way *stopcock* (valve), you can flush the drain without removing the bag. Remember that the stopcock switch (which may be marked with the word “OFF”) points to the channel that is off. On all drains, the switch is the longest part of the stopcock.

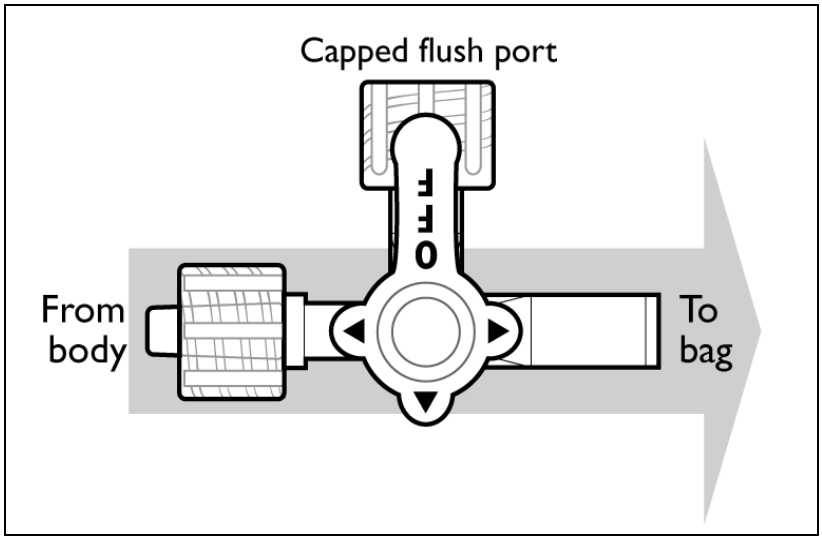
Flushing the Drain

1. Turn the switch so it points to the drainage bag (see top picture on page 7). The word “OFF” (or the longest part of the stopcock) will be closest to the drainage bag. This position allows you to inject fluid into the tube from the flush port.
2. Inject the amount of fluid (most times about 10 cc) your doctor told you to use.

3. Turn the switch so it points to the flush port again (see bottom picture below). The word “OFF” (the longest part of the stopcock) will be closest to the flush port. Your drain will now drain into the bag.
4. If your instructions include “clamping” the tube or allowing it to drain internally, turn the switch so it is pointed at your body. This means the word “OFF” (the longest part of the stopcock) is closest to your body. This position closes the channel that drains from your body. **Use this position ONLY to change or empty the bag. This position prevents your tube from draining.**



In this drawing, the stopcock switch points to the drainage bag. (The word “OFF” is closest to the drainage bag.) This position allows you to inject fluid into the tube from the flush port.



In this drawing, the stopcock switch points to the flush port. (The word “OFF” is **not** pointing to your body or the drainage bag.) This position allows your drain to drain into the bag.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

Radiology/Imaging Services:
206-598-6200

_____

_____

_____

_____

Caring for Your Dressing (Bandages)

- Keep your dressing clean and dry.
- You may shower, but keep your drain covered. Do **not** sit in a bath or hot tub, or go swimming. Fluid may get into your drain.
- Change your dressing daily with normal saline. Your nurse will teach you how to do this.
- If your dressing gets wet or dirty, you must change it.
- When you leave the hospital, you will be given enough flushing and dressing supplies to last 3 days. You will need to buy more supplies at a medical supply center or a drugstore.

When to Call

Call your doctor if:

- Your wound becomes red, tender, and has a green discharge
- You have a fever higher than 101°F (38.3°C)

Cover your wound with a dressing and call your doctor **right away** if:

- Your drain moves so that you see more of it outside of your body than before
- Your drain falls out

Who to Call

University of Washington Medical Center (UWMC) Patients

Interventional Radiology nurse 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

Harborview Medical Center (HMC) Patients

Patient Care Coordinators ..... 206-744-0112 or 206-744-0113

After hours (between 5 p.m. and 7 a.m.), and on weekends and holidays
Ask for the Interventional Radiology Fellow on call 206-744-0147

If You Have an Emergency

Go directly to the nearest Emergency Room or call 9-1-1. Do not wait to contact one of our staff.

UW Medicine

Radiology/Imaging Services
Box 357115
1959 N.E. Pacific St. Seattle, WA 98195
206-598-6200

Published/Clinician Review: 02/2012
Reprints on Health Online: http://healthonline.washington.edu