



病人教育

放射/造影服務部



經皮穿刺腹部 或盆腔引流術

預期步驟

本手冊解釋什麼是經皮穿刺腹部或盆腔引流術，以及接受這種手術的預期步驟。

什麼是經皮穿刺引流術？

你的醫生要求我們將一條引流管（小型塑膠管）透過皮膚（經皮穿刺）放入你的體內。將由一名介入放射師插入你的引流管。這是一個醫生或醫師助理，接受過特別訓練，借助 X 光攝影、CT 掃描或超聲波的指引來做這種手術。用這種方法放入引流管安全很多，並且康復時間比正常手術要短。

我為什麼需要引流？

放入引流管的原因很多。一些較常見的原因是：

- **膿瘍**：身體內有一大塊感染，需用強力抗生素並將膿液清除。
- **漏液**：從腸道、胰腺、膽管或尿道漏出液體，可能需要將液體引流，讓滲漏痊愈。
- **感染性血腫**：皮膚下因感染積聚了血塊。
- **腎造口術**：泌尿系統如果有堵塞，可能需要引流。此外，治療腎結石亦需要引流。
- **膽汁引流**：如果膽道阻塞，必須對膽道進行引流以防止感染或肝臟損害。

放入引流管有危險嗎？

放入經皮穿刺引流管通常是一種非常安全的手術，其好處遠大於危險。但是，一些意外的情況可能會發生。最常發生的並發症是：

- 出血（如果血管被意外刺穿）
- 血液感染（如果細菌進入血液）
- 皮膚感染（如果導管長時間留在皮膚內）
- 損傷神經或重要器官（例如腸道）

你的醫生會向你講述有關這種手術的危險性。請確保你的疑問和擔憂都得到解答。

我將需要引流多長時間？

引流管必須留放置多長時間取決於引流管所放的位置和所治療的是什麼疾病。有時候，引流管必須留在體內數周或數月。我們不會將引流管放置時間長於所需時間。

時間久了，引流管會被堵塞。如果你的引流管需要放置很多個月，便需要每 2 至 3 個月更換引流管一次。

手術前

- 如果你是門診病人，會有一個護士協調員在你手術前一天的下午打電話給你。如果你的手術是在星期一進行，該護士會在上一周星期五打電話給你。該護士將給你最後的指示，並回答你提出的任何問題。
- 如果你的英語不是很好，不能明白這些指示或手術細節，請立即告訴我們。我們將會安排一個醫院翻譯員協助你。**家人或朋友也許不能為你翻譯。**
- 你多半需要在手術前的 14 天內完成所有驗血。有時候，我們是在你來到醫院做手術時為你驗血。我們將告訴你是否在那天之前需要血液樣本。
- 如果你在服用任何血液稀釋藥物（例如 Coumadin、Lovenox、Fragmin 或 Plavix），你可能需要在手術前 3 至 9 天停用這些藥物。你將獲得有關這方面的指示。
- 如果你患有糖尿病並在注射胰島素或甲福明二甲雙胍（二甲雙胍），你將在手術那天獲得有關控制或調整劑量的指示。

鎮定藥

- 放入你的經皮穿刺引流管後，將透過靜脈注射給你注入鎮定藥（類似 Valium 和嗎啡）。這種藥會使你困倦欲睡，幫助你放鬆，並減輕你不舒服的感覺。但你仍然會保持清醒。這種方法稱 清醒鎮定。手術完成後，你會仍然感到困倦欲睡一段時間。
- 對於某些人，使用清醒鎮定是不安全的。如果你是這樣的人，你將需要使用麻醉劑（在手術期間使你睡覺的藥物）。
- 如果你有以下情況，請**立即**告訴我們：
 - 過去接受普通手術時需要麻醉
 - 患有睡眠窒息或慢性呼吸性疾病（你在睡覺時可能要使用 CPAP 或 BiPAP 裝置）
 - 使用高劑量的麻醉止痛藥
 - 患有嚴重的心臟病、肺病或腎病
 - 因 背部或呼吸問題不能平躺 1 個小時
 - 在醫療手術期間很難安靜地躺著
 - 體重超過 300 磅（136 公斤）

手術前一天

準備注射鎮定劑時，必須嚴格遵守以下指示：

- 手術前一天，你可以如常進食。
- 從手術前 **6 小時** 開始，你只能飲清流質（透明的液體，例如水、雪碧、紅莓汁或淡茶）。
- 從手術前 **2 小時** 開始：
 - 不能用口進食**任何東西**。
 - 如果你必須服藥，**只能**飲一口水送藥。
 - 切勿服用維他命或其他營養補充藥。空腹服用這些藥會引起腹部不適。
- 你**必須**有一個成年人負責開車送你回家，並在那天的剩餘時間陪伴你。你**不能**自己開車回家，或乘坐公共汽車、的士或穿梭巴士回家。

手術當天

- 手術當天，服用所有你常用的其他藥物。**切勿**漏服這些藥物，除非你的醫生或護士叫你停止服用。

- 隨身攜帶一份你服用的所有藥物的清單。
- 請準備留在醫院大半天時間。有時候手術要延遲開始，這是經常發生的，因為我們需要治療其他突發的和急症的病人。如果出現這種情況，謝謝你的耐心等待。
- 除非已告訴你，否則你必須遵循以下指示：
 - 如果你是華盛頓大學醫療中心(UWMC) 的病人，請到醫院 3 樓（主層）的入院部報到。入院部位於大廳右側，詢問台後面。
 - 如果你是 Harborview 醫療中心 (HMC) 的病人，請到 Maleng 大樓 8 樓的非住院手術區 (APA)。
- 將會有一個醫護助理給你一件醫院衣服穿上，並給你一個袋裝你的私人物品。這時你可能要去如廁排清大小便。
- 會有一個職員帶你到術前準備區。在那裏，護士將為你做健康評估。你的家人或朋友可以在那裏陪著你。
- 開始靜脈注射。將透過靜脈注射給你注射液體和藥物。
- 介入放射科醫生將會向你介紹這次手術，並要求你簽署一份同意書，如果你尚未簽署的話。這時你可以向醫生問問題。

手術

- 護士將帶你到放射室。該護士將在整個手術過程中陪伴著你。
- 你將躺在一張平坦的手術臺上，讓醫生能夠用 X 光看到你的身體內部。
- 我們將在你的身體上放置一些電線，以幫助監視你的心率。
- 你的手臂將套上一個血壓套。該套會不時充氣以檢查你的血壓。
- 放射技師將用一種專用肥皂為你清潔手術部位周圍的皮膚。如果你有任何過敏，請告訴該技師。該技師可能需要為你剃去某些手術部位皮膚上的毛。
- 我們的整個醫療小組都會要求你確認你的姓名，並告訴你我們計劃做些什麼。這是為了你的安全。

- 然後，你的護士將給你注入一些藥，以便在手術開始前使你感到困倦欲睡和放鬆。
- 如果需要，將安排一個翻譯員在手術室內，或者讓翻譯員能夠透過對講機聽到你的聲音以及和你對話。
- 你的醫生將在引流管伸出皮膚的部位進行局部麻醉（施用麻藥）。麻藥會令你有一種持續 5 至 10 秒鐘的燒痛感，然後該部位會變麻木。之後你只會感到壓力，不會感到銳痛。
- 然後，你的醫生將一根針導入將要放置引流管的地方。然後用一條約 ¼ 英寸寬的塑膠引流管替換掉那根針，再用縫線將引流管固定在你的皮膚上。
- 整個手術過程通常需要 1 到 2 個小時。

手術後

- 我們將在放射科裏對你手術後的情況進行短時間的嚴密監視。
- 如果你是門診病人，之後你會轉到醫院的另一個科室。那裏的護士將繼續監視你手術後的情況。
- 你多半能夠吃喝東西，你的家人可以探訪你。
- 如果你是門診病人，當你完全清醒、能夠進食、如廁和行走後，你便可以離開醫院。
- 這種手術很少在手術後出現問題。如果出現問題，我們可能需要將你留在醫院，以便能夠監視你的情況或☒你治療。
- 在你離開醫院前，你的護士將會告訴你你能夠進行哪些活動，如何護理你的導管以及其他重要指示。

回家後

- 當天的其餘時間在家休息。確保有一個家人、朋友或照顧者幫助你。你可能會感到困倦欲睡，或有些短期失憶。
- 在 24 小時內，切勿：
 - 駕駛汽車或操作機器
 - 喝酒
 - 作出重要的個人決定或簽署法律文件

- 負責照顧另一個人
- 手術完成 24 小時後，你可以淋浴或洗澡。
- 介入放射手術後通常只有輕微的疼痛。如果你的醫生同意你服用醋氨酚 (Tylenol)，應該可以舒緩你感到的任何不舒服症狀。如果你的醫生預期你會有更嚴重的疼痛，將會給你開處方來購買更強的止痛藥。如果處方藥仍不能止痛，請打電話給我們。
- 一旦開始進食，便可以恢復服用你的藥物。只能服用你的醫生☑你開的或同意你服用的藥物。

何時打電話給我們

如果你出現以下情況，**立即**打電話給我們：

- 出現大量流血或在引流液中有新鮮血液
- 發燒超過 101°F (38.3°C) 或發冷
- 嘔吐
- 導管周圍有滲漏
- 引流管掉出來或可以移動
- 幾天排出大量液體後，排液突然停止

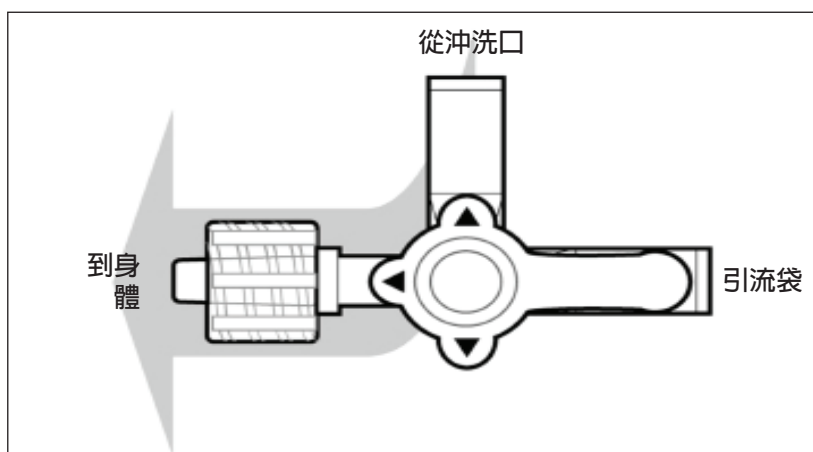
護理引流管

- 每次清空引流袋時，記錄下你所收集的液體量。引流袋上有以毫升 (ml) ☑單位的標記。估計出總量。**記錄下你每天的排出量**。前來進行引流評估時，帶上你的記錄。
- 當每天排出的液量連續 2 至 3 天少於 10 毫升時，打電話給我們。**也許**可以將你的引流管取出。
- 許多引流管必須每天沖洗，以防止阻塞。你的醫生將會告訴你你的引流管是否需要沖洗，以及隔多長時間沖洗一次。
- 如果你的引流管有個 3 通閥（閥門），你可以不用取出引流袋來沖洗引流管。記住，三通閥的開關（此開關可能用“關”字來標記）指向關閉的通道。在所有引流管上，該開關是三通閥的最長部分。

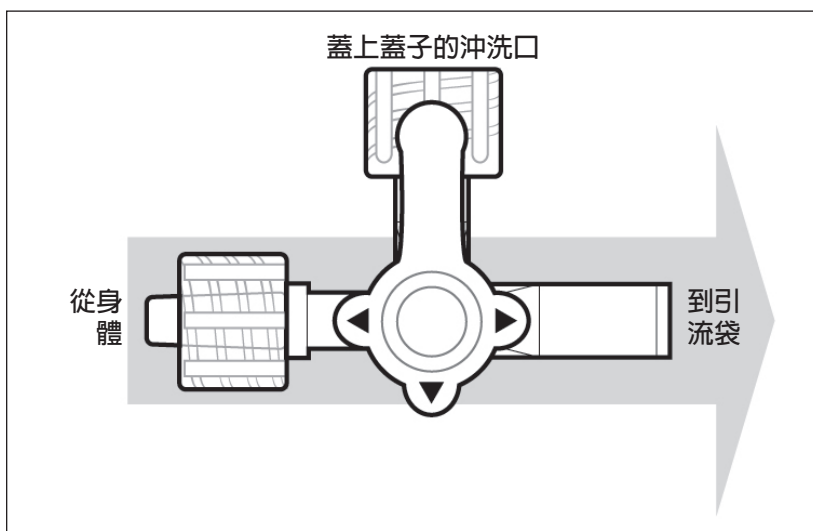
沖洗引流管

1. 轉動該開關，使其指向引流袋（見第 7 頁頂部插圖）。這時“關”字（或三通閥最長部分）最靠近引流袋。這個位置可讓你將液體從沖洗口注入引流管。

2. 注入醫生叫你使用的液體量（大多時候☒ 10 毫升左右）。
3. 轉動該開關，使其重新指向沖洗口（見下面底部插圖）。這時“關”字（或三通閥最長部分）最靠近沖洗口。現在，你的引流液將會排入引流袋。
4. 如果醫囑包括“夾住”管子或讓液體向內排出，要轉動開關，使其指向你的身體。這意味著“關”字（或三通閥最長部分）最靠近你的身體。這個位置可以關閉從你身體排出液體的通道。只能使用這個位置來更換或清空引流袋。這個位置可以防止你的管子排出液體。



在這幅圖中，三通閥開關指向引流袋（“關”字最靠近引流袋）。這個位置讓你可以將液體從沖洗口注入到管子。



在這幅圖中，三通閥開關指向沖洗口（“關”字不是指向你的身體或引流袋）。這個位置讓你將排出液排進引流袋。

有任何問題嗎？

你的問題很重要。如果你有任何問題或疑慮，請致電你的醫生或保健提供者。UWMC 診所的醫護人員也可以隨時提供幫助。

放射/造影服務部：
206-598-6200

護理你的敷料（繃帶）

- 保持你的敷料清潔和乾燥。
- 你可以進行淋浴，但必須將引流管包住。切勿坐在浴缸或熱水澡桶裏洗澡，或去游泳，因水會流進你的引流管。
- 每天用普通生理鹽溶液更換敷料。你的護士將教會你如何更換敷料。
- 如果你的敷料弄濕或弄髒了，必須更換敷料。
- 當你離開醫院時，醫院將會給你足夠 3 天使用的沖洗和敷料用品。你需要在醫療用品中心或藥房購買更多用品。

何時打電話給你的醫生

如果出現以下情況，打電話給你的醫生：

- 你的傷口變得又紅又痛，並有綠色液體排出
- 你發燒超過 101°F (38.3°C)

如果出現以下情況，用敷料包住你的傷口，並立即打電話給你的醫生：

- 你的引流管移動了，你看到身體外的引流管比以前長了
- 你的引流管掉了出來

打電話給誰

華盛頓大學醫療中心 (UWMC) 的病人

介入放射科護士協調員.....206-598-6897

手術安排處.....206-598-6209

下班時間（下午 5 點至上午 7 點），周末和假節日

找值班的介入放射科醫護人員.....206-598-6190

Harborview 醫療中心 (HMC) 的病人

病人護理協調員..... 206-744-0112 或 206-744-0113

下班時間（下午 5 點至上午 7 點），周末和節假日

找值班的介入放射科醫護人員.....206-744-0147

如果你是看急診

直接去最近的急診室，或致電 9-1-1。切勿等待聯繫我們的某個醫護人員。

UW Medicine

Radiology/Imaging Services

Box 357115

1959 N.E. Pacific St. Seattle, WA 98195

206-598-6200



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

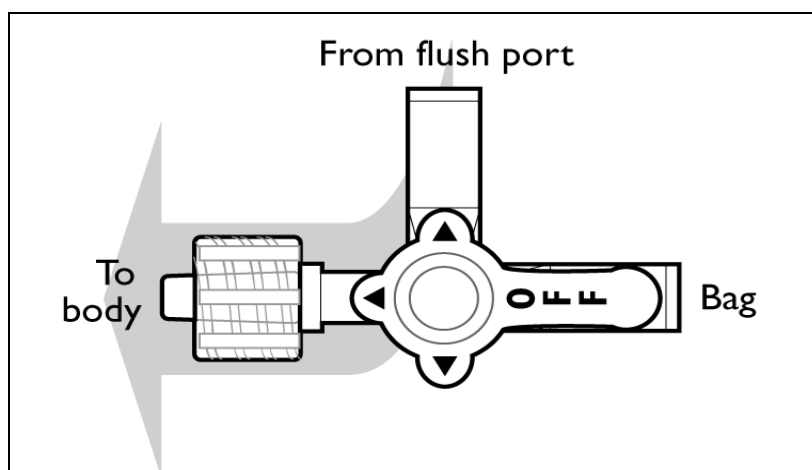
Caring for Your Drain

- 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.

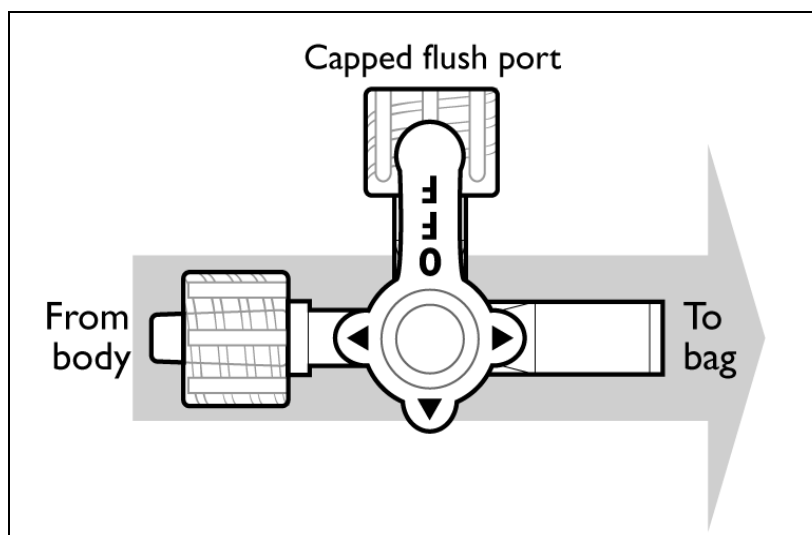
Flushing the Drain

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