



BILIARY DRAIN CARE INSTRUCTIONS

Discharge Instructions for Percutaneous Biliary Drainage

1. You received a Percutaneous (meaning through the skin) Biliary Drain to help remove bile due to an obstructed bile duct. You may experience soreness for several days after the drain is placed. This should improve. You should not do any activity that causes pulling or pain around the catheter or kinking of the catheter. You may shower, but the dressing must stay dry. Cover the dressing with plastic wrap so it does not get wet. It may be easier to take a sponge bath. Do not take a tub bath, soak in a hot tub, or go swimming.
2. Flush your drainage catheter with 10 ml of sterile saline 2-3 times a day (or as directed by your doctor). Flushing the catheter helps to prevent it from getting clogged.
3. Measure and write down daily output.
4. Your primary doctor may be able to arrange for a visiting nurse to take care of the dressings and provide drain care. If you are not to have a home nurse, before you leave the hospital make sure you and your family know how to change the dressing, flush the tube, and where to get supplies.
5. Call **Quantum Radiology 678-581-3830** right away if you notice any of the following:
 - increasing pain
 - chills or fever greater than 100.5
 - catheter becomes dislodged or broken
 - leaking from the catheter
 - blood or clots in or around the catheter
 - drainage or discharge from the catheter insertion site
 - jaundice (yellowing of the skin and eyes), nausea, vomiting, abdominal pain

If you have any questions or concerns after 5:00 p.m. on a weekday or anytime over the weekend, please call **Quantum Radiology at 678-581-3830**

Please make sure that you have a follow-up visit scheduled with your Surgeon or Primary Care Doctor.

How to Flush Your Drainage Tube

Flushing your drainage tube helps to keep it from getting clogged. You should flush your tube 2-3 times a day (or as directed by your doctor) with 10 ml of normal saline.

Gather your supplies:

- Alcohol wipes
- 10 ml Saline syringe
- Non-sterile Gloves

Flushing a Tube that has a Stopcock and a Drainage Bag

The tube that comes out of your body is connected to a device called a stopcock. The stopcock has three openings, or “ports.” One port is connected to the tube in your body, one is connected to your drainage bag, and the third port leads to the outside air. This is the flush port. It may have a blue cap on it that allows for a flush syringe to be attached.

A lever on the stopcock, with “OFF” printed on it, is used to change which route is open or closed. The lever always points to a pathway that is closed. When the lever is pointed toward the flush port, fluid can drain through the tube in your body and into the collection bag. The adjacent picture displays how the stopcock should look when the stopcock allows fluid to drain from the body to the collection bag.



Flushing Your Tube:

1. Wash your hands with soap and water and dry well. Wear non-sterile gloves if you have them.
2. The stopcock lever should be pointing in the OFF position to the flush port. Wipe the flush port with an alcohol swab.
3. Remove the cap from the saline syringe and remove all air from the syringe.
4. Screw the syringe onto the flush port.
5. Move the lever on the stopcock toward the bag. (This closes the pathway from the flush port to the bag.)
6. Push the syringe plunger gently but steadily, injecting 10 ml into the tube.
7. Turn the lever on the stopcock back to where it was. “Off” should be pointing to the syringe.
8. Unscrew the syringe.
9. Wash your hands.

If the Tube Stops Draining:

- Make sure the pathway from the tube to the bag is open. The lever marked OFF should be pointing up toward the flush port.
- Check for kinks in the tube. If a kink is present, try taping the tube so that it lies smooth.
- Inspect the tube to see if something is blocking the inside of the tube. Sometimes small bits of tissue or old blood will block the tubing. Try flushing the tube to both the body and the bag. This can be done by turning the stopcock OFF to the bag and flushing to the body, then OFF to the body and flushing to the bag.
- Call **Quantum Radiology at 678-581-3830** if you cannot flush the tube.

Changing Your Dressing

Note: Your dressing must be changed every 3 days or more often as needed.

Procedure:

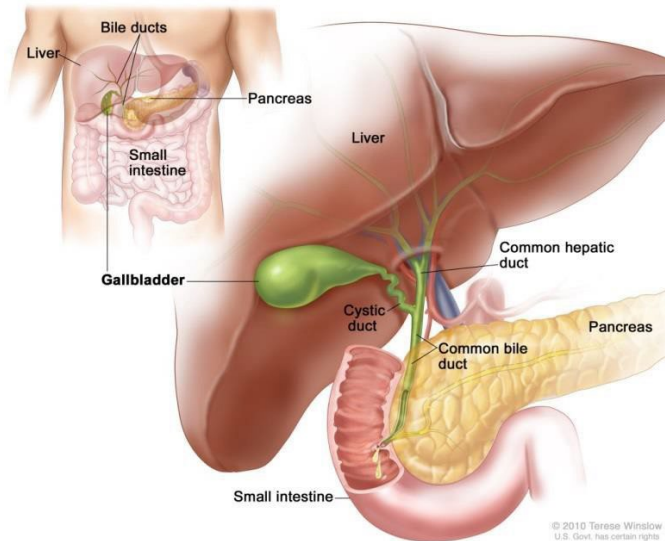
1. Gather supplies:
 - Cotton swabs or gauze, Alcohol swabs, saline or peroxide to clean the insertion site.
 - 4x4 Gauze, Tape or Tegaderm to dress the site.
 - Gloves (optional)
2. Wash and dry your hands. Put on gloves if you have them.
3. Remove old dressing while holding tube in place.
4. Inspect tube and skin. Look for redness, warmth, leakage, or breaks in the tube.
5. Clean the skin. Let dry.

4x4 Gauze Dressing:

1. Use precut 4x4 gauze dressings or cut a slit in a 4x4 gauze.
2. Slide gauze dressing across skin so that the drain is now exiting out the center of the gauze. Place additional gauze over the tubing for comfort.
3. Place tape or Tegaderm over gauze to keep dressing in place.
4. Wash hands.



The Biliary System



Bile is a liquid made by your liver that helps break down food. When your bile duct is narrowed or blocked the bile cannot flow into the small intestine. This causes the bile to collect in your liver. The build-up of bile in your liver can cause infection, nausea, vomiting, fever, itching, and jaundice (when the whites of your eyes and your skin look yellow). A drain or stent can be put into a biliary duct so the bile can drain out of the body.

Biliary drainage is a thin to thick, golden yellow, brown, or green liquid.

Types of Biliary Drainage Devices

1. External Biliary Drain: A thin, flexible tube that runs from outside your body into a bile duct.
2. Internal/External Biliary Drain: A tube that runs from outside the body into the bile duct and then into the small intestine.
3. Biliary stent: A metal mesh tube that is placed inside the liver from the bile duct to the small intestine.

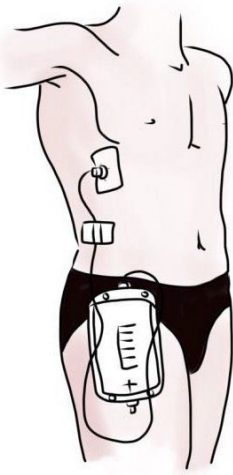
Follow-Up Care

- Biliary tubes are usually changed every 2-3 months to keep them open and prevent infection. Your treatment plan may be different. Your doctor will set the schedule for your tube change appointment. Call **Quantum Radiology 678-581-3830** if you have any questions about when you should be seen.

Caring for your Catheter Drain

- Inspect the external tube often for kinks, especially if the dressing is wet and leaking bile. Flush the tube twice daily with 10ml saline. See the instructions above.
- Write down the color of the bile and how much is in the bag every time you empty the drainage bag. There is a useful chart on the last page.
- Empty the bag as often as needed.
- Empty the drainage bag through the spout at the bottom of the bag. **DO NOT** disconnect the tube from the bag.

Keep the bile bag below the insertion site so it will drain easily.



How do I drain the bag?

Make sure your hands are thoroughly washed with soap and water before you empty the drain. Wear non-sterile gloves if you have them. If the collection bag is getting full you can empty it down the sink or toilet by turning the blue cap at the bottom of the bag. This cap acts like a valve. If you turn it one way, it opens up to let the fluid drain out. Once the collection bag is emptied, do not forget to tighten the blue cap or fluid will leak.



Your doctor may want your tube to be capped and not drain to a bag. This is the normal course progressing toward the removal of your tube. If your tube is capped there may be a blue or red cap at the end of the tube. Or there may be a stopcock attached to the end of the tube. The stopcock

valve should be turned “OFF” to the tube. If your tube is capped it still needs to be flushed twice daily with 10ml of normal saline. Follow the Flushing instructions previously described.

Report any of the following:

Signs of Infection:

- Temperature over 100.5°, jaundice (yellowing of the skin and eyes), nausea, vomiting, abdominal pain
- Redness, pain, and warmth around the tube insertion site.
- Foul smelling or thick yellow drainage from the tube insertion site.
- **If any signs of infection develop attach the drainage bag to the tube and open the stopcock to allow drainage of bile to the bag. Contact Quantum Radiology 678-581-3830 immediately.**

Tube Problems:

- Tube appears to be blocked
- Pain when you flush the tube
- Fluid leaking from the area where the tube enters the skin
- Difficulty flushing the tube (it is hard to push the fluid out of the syringe)
- You are unable to flush the tube



Please keep this daily record of drain output.

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