

Going Home With
a Drain from Your Liver
**Percutaneous Transhepatic
Biliary Drain**

Percutaneous Transhepatic Biliary Drain (PTBD)

Your liver produces bile which helps in the digestion of food; the bile drains into the duodenum (a portion of the small bowel) through a system of ducts called the 'biliary tree'. If there is a blockage in, or poor drainage from the biliary tree, the bile does not drain properly and your skin becomes yellow (jaundiced) and you may experience pain.

A PTBD (biliary drain) is inserted through the skin into the liver to allow for proper drainage of the bile when there is a blockage in, or poor drainage from the biliary tree. This drain will allow proper drainage of the bile.

In some situations, the bile drains out of your body and into a small drainage bag. In other situations, the bile drains into the bowel and you do not need a bag on the outside. Either way the goal is to help treat your jaundice and pain.

Your surgeon will decide whether the drain should be removed, capped or attached to a drainage bag prior to you going home from the hospital.

Potential Problems

There are some potential problems which may arise with your PTBD.

For example:

1. Skin infection

A skin infection may include redness, soreness or swelling of the skin around the drain site. This can be prevented by taking good care of the skin around the insertion site. Make sure the drain site is kept dry. If the dressing is wet, please change it as soon as possible. You will be provided with some dressing supplies and additional supplies can be purchased at any medical supply store.

2. Drain blockage

There is nothing you can really do to prevent this, except to keep the drain below the insertion site.

If you notice any of the following, your drain may be blocked:

- a decrease in drainage
- an increase in jaundice (yellow skin colour)
- fever
- chills

Immediately contact your surgeon or go the nearest emergency department.

Care of the Insertion Site

The drain may be secured to your skin with a stitch, or it may have a large blue disc at the level of your skin. Neither of these should be removed or adjusted. You will have a light dressing over the site, and it should be changed every 3 to 4 days or more frequently if soiled.

You can take a shower; **avoid taking baths**. When you take a shower, leave the current dressing on, wrap a piece of plastic saran wrap on top and tape the edges with waterproof tape. This will prevent water from getting underneath the dressing. If the area gets wet, dry the skin completely.

Care of the Tube and Bag

The biliary drain is actually a long, narrow silicone-like tube that sits in your liver and comes out through a tiny opening, either on your right side or around the middle of your belly. The tube is attached to a drainage bag that will collect bile.

Wash your hands before and after contact with the drainage bag.

The bag should be secured with a pin to your clothing or strapped to your thigh. The bag **must** be kept below the level of the insertion site.

The bag should be emptied whenever it is about half full or about every 6 to 12 hours. It's important you record the amount of drainage after emptying. **A large decrease in drainage should be reported to your surgeon.**

PTBD Capped Versus Being Attached to a Drainage Bag

If you are sent home with a capped PTBD, **do not** open and close the system as you wish. **Only open the system** and attach it to a drainage bag if you experience any of the following signs and symptoms:

- chills, fever over 38.5° C for 2 straight readings, 4 hours apart
- increased jaundice
- increased pain
- persistent nausea and/or vomiting

How to Connect a PTBD to a Drainage Bag

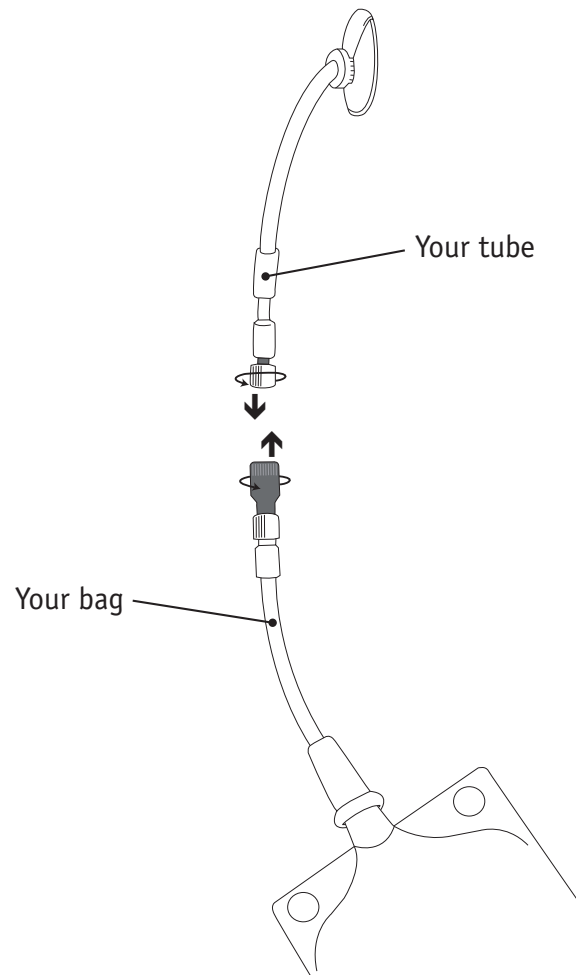
- 1) Wash your hands
- 2) Unscrew the cap from the drainage bag and unscrew the cap from your PTBD. **Do not** touch the connection site (tip) of each drain.
- 3) Screw together the drainage bag and your PTBD.

If you have any problems or questions call the radiology department at 604-875-4340.

When you attach your PTBD to a drainage bag, make sure you inform your surgeon's office. He or she may want to see you at their office or arrange for an x-ray.

A cholangiogram (picture of the bile ducts) may be taken prior to removing the drain. The drain will be removed by the radiology department or by your surgeon during your follow-up appointment.

Note: If your symptoms start to improve, leave the PTBD attached to the drainage bag until you are seen by your surgeon or the radiology department.



Call your Surgeon, the Radiology Department or go the nearest Emergency room if you notice:

- chills, fever of a temperature over 38.5°C or 100.5°F for 2 straight readings (4 hours apart)
- a sudden increase in abdominal pain
- a return of jaundice
- blood in the drainage bag
- bile or pus leaking around the insertion site onto the dressing
- redness around insertion site
- drainage stops or decreases by a large amount
- the drain is accidentally pulled on, moves out of position or it if completely falls out

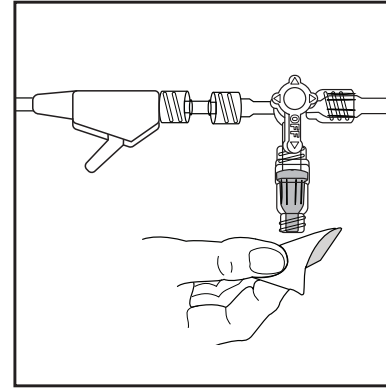
PTBD Care and Flushing

Prior to you going home, the nurses will teach you how to manage and care for the PTBD. You will be shown how to empty and record the amount of drainage.

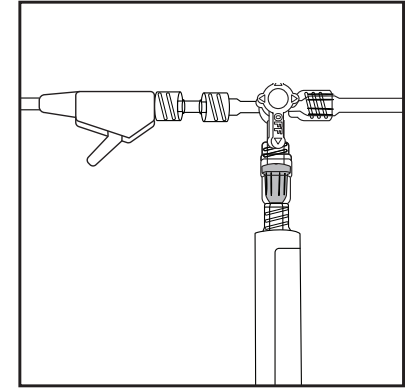
In some cases, your surgeon may want you to flush your PTBD one or more times daily. Prior to going home, the nurses will teach you how to do the flushing.

Steps for flushing:

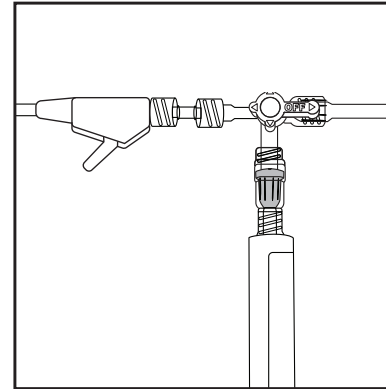
1. Wash your hands before and after flushing the PTBD
2. Turn the stopcock valve OFF toward the drainage bag
3. Clean the flushing port with alcohol swab
4. Attach the flush syringe (10 cc syringe pre-filled with sterile normal saline)
5. With steady pressure inject all the normal saline fluid into the drain
6. Turn the stopcock valve Off toward the flushing port
7. Disconnect syringe
8. If you cannot flush your PTBD, contact your surgeon as soon as possible



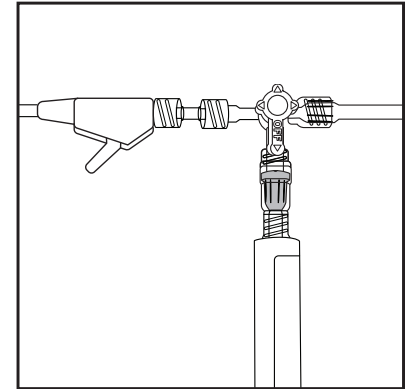
1. Clean blue flush port with alcohol swab and let it dry for 20 seconds



2. Attach 10cc syringe pre-filled with normal saline to flush port



3. Turn off valve towards drain bag and flush drain



4. Turn the off valve towards the flush port and remove syringe

The drain will be removed during your follow-up appointment by your surgeon or radiology department. A cholangiogram (picture of the bile ducts) may be taken prior to removing the drain. Therefore, it is important you empty and record the drainage daily (as taught in the hospital by the nurses). When the drain is removed, some fluid may leak from the opening site. A small dressing will be applied until the drainage stops.

Monitoring Output from Drain

Empty and record on the chart below the amount of drainage **at least twice a day** and as needed.

Date	Time	Type of Drain	Amount	Colour

Questions to Ask Hospital Staff

After reading this booklet, you may have some questions. Feel free to write them down here to ask your surgeon and/or nurse.



Making better
decisions together
with patients
and families

For more copies, go online at <http://vch.eduhealth.ca> or
email pchem@vch.ca and quote Catalogue No. **FK.750.P412**
© Vancouver Coastal Health, August 2019

The information in this document is intended solely for the
person to whom it was given by the health care team.
www.vch.ca