Biliary Drainage
Patient Information
What is biliary drainage?

Biliary drainage is the process of draining the bile through the skin using a tube. The bile is a fluid produced by the liver that helps in the digestion of fats and is stored in the gallbladder. It is usually required when there is a blockage in the bile duct due to a stone, a narrowing (stricture) or a mass. This leads to a build-up of bile within the body, leading to a yellow discolouration of the skin (jaundice), itching and dark urine. The blockage can be relieved with this procedure using a catheter and stent that drains the bile into an external bag.

When do I need biliary drainage?

You would need biliary drainage when there is:

- Blockage in the bile duct
- Narrowing of the bile duct (stricture)
- A hole in the bile duct
- Planned surgery for the removal of a bile duct stone

Biliary drainage cannot be performed under the following conditions:

- Ascites (accumulation of fluid in the abdominal cavity)
- Uncontrollable bleeding
- Pregnancy

Who makes the decision to perform biliary drainage?

Your doctor and the interventional radiologist performing the procedure discuss your case and decide if biliary drainage is necessary.

How do I prepare for the procedure?

- Stop eating or drinking six hours before the test. You may continue taking your medicines with water. Please consult your doctor if you are on diabetes medication.
- Inform your doctor if you have any allergies or have had a bad reaction to any procedure in the past.
- Tell your doctor, if you are taking any blood thinning medications, as these may need to be stopped.
- You may be asked to get some new laboratory tests including PT, aPTT, INR and platelet count.
- It is advisable to bring an attendant with you.

What happens during the procedure?

- You will be asked to lie down on your back, on the X-ray table.
- A cannula (thin tube to administer medication) will then be inserted in your arm so that the interventional radiologist can give you medicine to make you feel relaxed, if required.
- Sensors will be attached to your body to monitor your vitals.
The skin on the right side of your abdomen will be cleaned and then a local anaesthetic will be injected.

A small incision (cut) is made in the skin through which a needle will be inserted into your biliary system, under the guidance of imaging.

Once an acceptable spot is reached, the contrast will be injected to see the anatomy of the biliary ducts.

The obstruction is removed which allows for opening up the tight segment.

A drainage catheter or stent will then be placed in the common bile duct and will be connected to a bag attached to the skin with sutures.

This procedure usually takes an hour to complete and 4-6 hours to recover but each case is different and it may take longer.

Will it hurt?

- You may feel slight pain when a local anaesthetic is injected, after which the area will become numb.
- You may feel a warm sensation when the contrast media is injected.
- You may feel pain when the obstructed system is dilated. Your doctor will give you intravenous painkillers to help with this.

What happens afterwards and what precautions are necessary?

- If you are an inpatient (admitted at the hospital), you will be shifted back to your ward. Nurses will carry out their regular observations.
- If you are an outpatient (discharged on the same day), you will be kept in the recovery room of the radiology department for regular observations. You will then be discharged from the hospital when stable.
- You may resume your usual diet after 6 hours.
- The symptoms you had before placing the biliary drain, will gradually disappear.
- The use and time duration of the drainage bag will be determined by your doctor. Take care of the bag and the stitches. They should not be pulled out.
- Inform the doctor if the tube stops draining bile (yellow fluid) or if there is continuous blood flow.

Are there any risks or complications associated with the procedure?

- Biliary drainage is a relatively safe procedure.
- You may have pain at the site of the incision or in the abdomen. This pain can be relieved by pain killers.
- There is a small risk of contracting an infection. Therefore, to reduce the risk, antibiotics are given before the procedure and continued afterwards as well.
- There is also a small risk of bleeding. For this reason, your ability to clot is checked before the procedure.
- Please contact your doctor if you have any signs of an allergic reaction which include itching, redness, difficulty breathing, swelling or dizziness.
How can I get my radiology films and reports?

Reports and films can be collected 24 hours after the procedure from the Radiology delivery counter from 9:00 am to 9:00 pm, Monday to Saturday.

Please note the following:

• Bring your doctor's prescription and previous medical/radiology record on the day of procedure.
• Please arrive 15 minutes before the scheduled time for registration and other formalities. Late arrival may lead to delay/rescheduling of your examination.
• Patients requiring urgent care may be given priority. This may result in a delay in starting your procedure. Your cooperation in this regard will be highly appreciated.
• If you are pregnant or if there is a chance you might be pregnant, inform your doctor before the procedure. Your doctor may reschedule or cancel the examination.
• It is advisable to bring an attendant with you.

For further information and assistance:

Please contact the Radiology department reception at 021-3486-2057 between Monday and Saturday from 8:30 am to 5:15 pm, except on public holidays.