Draining your blocked bile ducts

This information sheet aims to answer some of the questions you may have about having your bile ducts drained. It gives information on a method called percutaneous transhepatic biliary drainage (PTBD). The procedure is carried out by an interventional radiologist (a doctor who uses imaging machines to diagnose and treat illnesses).

If you have any questions or concerns, please do not hesitate to speak to the radiologist or nurse caring for you in the Interventional Radiology Department.

To have PTBD you will usually need to stay in the hospital. You should be given a copy of our leaflet, Preparing for your stay at Guy’s or Preparing for your stay at St Thomas, which gives you more information about the hospital, how to get here and what to bring with you. Please ask us for a copy if you do not have one.

What is PTBD?
PTBD is the drainage (unblocking) of blocked bile (biliary) ducts. Percutaneous means it is done through the skin and transhepatic means it is relating to the liver.

Bile is produced by your liver. Normally it drains through a series of tubes before emptying into the duodenum, (the first part of your bowel after your stomach). If part of your system of bile ducts becomes blocked, for example by gallstones or a tumour, then the bile needs to be drained another way. Therefore, percutaneous biliary drainage is the passage of a tube through the skin into the liver enabling bile to be drained externally.

What are the benefits of PTBD?
If bile is allowed to build up it can cause jaundice. With jaundice, your skin and eyes turn yellow and you may feel uncomfortable or sick and lack energy. The PTBD will remove the bile from the bile ducts and relieve these symptoms.

Are there any risks of PTBD?
Serious risks and complications of having PTBD are rare. However, as with any procedure, some risks or complications may occur. The radiologist will explain these to you:

- **Infection** in the liver or in the blood – but we will give you antibiotics before the procedure to help prevent this.
- **Bleeding** from your liver or bile duct – but this is uncommon.
- **Bile peritonitis** (inflammation of the peritoneum). This is a rare but serious complication where leakage of bile from the common bile duct may occur. This can usually be treated with surgery.
Are there any alternatives to a PTBD?
There are other ways to drain a blocked bile duct but they are not suitable for everyone. One of them is endoscopic retrograde cholangio pancreatography (ERCP). This involves passing a thin, flexible tube through your mouth and stomach into your intestine.

If you would like more information on this or other procedures, and whether they are suitable for you, please talk to your doctor.

How can I prepare?
You will need to have a blood test before the PTBD. Your doctor or clinic nurse specialist will tell you how to arrange this when they recommend the procedure.

Outpatients
- You cannot eat or drink anything (except water) for six hours before procedure. You can drink water up to 2 hours before the procedure.
- Please let us know if you are taking any antiplatelet medicines (for example, aspirin, clopidogrel) or any medicines that thin the blood (for example, warfarin, rivaroxaban), as these may need to be withheld temporarily before the procedure. Call the Interventional Radiology Department for advice as soon as you get your appointment letter on 020 7188 5573 (for Guy’s Hospital) or 020 7188 5477 (for St Thomas’ Hospital).
- If you are taking medicines for diabetes (for example, metformin) or using insulin, then these may need to be altered around the time of the procedure. Call the Interventional Radiology Department on the numbers above for advice as soon as you get your appointment letter.
- An intravenous line (cannula) will be inserted into a vein in the back of your hand before the procedure and you will be given antibiotics and fluids through this line. This is to help prevent infection.

Inpatients
If you are staying in the hospital all necessary preparation will be arranged by the doctor on the ward in charge of your care.

Giving my consent (permission)
The staff caring for you will ask your permission to perform the PTBD. You will be asked to sign a consent form that says you have agreed to the procedure and that you understand the benefits, risks and alternatives. If there is anything you don’t understand or you need more time to think about it, please tell the staff caring for you.

Remember, it is your decision. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind. Your wishes will be respected at all times. If you would like to read our consent policy, please tell a member of staff.
What happens during the procedure?
You will be taken into the interventional radiology theatre and asked to lie on your back on an examination table with your right arm away from the side of your body (possibly above your head). Monitoring equipment will be attached to you to measure your blood pressure, heart rate and the oxygen level in your blood. This is not painful. The nurse will start giving you sedation and pain relief to make you comfortable during the procedure.

Your skin will be cleaned with an antiseptic fluid. The radiologist will use an imaging camera and ultrasound machine to find the most effective position for the procedure. Once this is found, a local anaesthetic injection will be given to numb the area, so that you will not feel pain. The radiologist will use imaging and ultrasound guidance to place a plastic tube in your bile ducts. At intervals you may be asked to hold your breath for a few moments so that static (still) images can be taken of your bile ducts.

The long thin tube, called an internal/external drain will be placed across the narrowed duct. One end of the tube stays outside your body and connects to a drainage bag. The tube is secured to your skin with sutures (stitches). The sutures will be removed when the tube is removed.

The procedure usually takes between 30 and 90 minutes and you will then be transferred to the recovery room.

If the radiologist finds a narrowing in one or more of your ducts, you may need to return to the interventional radiology department two or three days after the PTBD for another procedure:

- **Balloon dilatation.** A thin plastic tube with a balloon attached to the end is positioned across the blockage. A special inflation device is used to expand the balloon a few times and then it is removed.
- **Stent.** A small metal or plastic tube (stent) is placed across the blockage. This is put into place through the external tube(s).

Will I feel any pain?
Most patients will have “conscious sedation”. This involves us giving you two medications through your cannula to relax you and ease your pain. This often causes you to forget most of the procedure afterwards however you are awake enough during the procedure to breathe for yourself and communicate with the staff.

If you have any pain during the procedure please tell the nurse so you can be given more pain relief.

What happens after the procedure?
Usually you will stay in the recovery room, until your ward nurse collects you. You will need to stay in bed for four to six hours, or as instructed by your nurse.

Your blood pressure and pulse will be checked frequently and you will be given more antibiotics. You may be able to eat and drink normally, or as instructed by your nurse.

If you have had a drain inserted, you will go back to the ward with a small tube in your stomach or the right side of your abdomen, which may be closed off or draining directly into a small bag.
The bile can be green, brown or yellow in colour. The tube will be checked frequently and you must be careful not to dislodge it.

The radiologist or your doctor will decide when the tube can be removed. This can be needed to stay in for few days or several weeks. Some patients can go home with the tube in place. If this is the case your ward doctor or nurse will tell you what to look out for including fever, pain, dislodged tube or leaking around the tube.

When your draining tube is no longer required you will return to the interventional radiology for a removal procedure.

Contact us
Please contact the Interventional Radiology Department at Guy’s Hospital on 020 7188 5573 or St Thomas’ Hospital on 020 7188 5477, Monday to Friday, 9am to 5pm, if you have any questions or concerns about having a PTBD.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

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t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS) – To make comments or raise concerns about the Trust’s services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

t: 020 7188 8801 at St Thomas’ t: 020 7188 8803 at Guy’s e: pals@gstt.nhs.uk

Knowledge & Information Centre (KIC) – For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas’ Hospital.

t: 020 7188 3416

Language support services – If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 fax: 020 7188 5953

NHS Choices – Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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