PATIENT INFORMATION

PERCUTANEOUS TRANSHEPATIC CHOLANGIOGRAM (PTC) AND DRAINAGE

This leaflet tells you about having a percutaneous transhepatic cholangiogram (PTC) and drainage. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you or the department which is going to perform it.

WHAT IS A PERCUTANEOUS BILIARY DRAINAGE?

A percutaneous biliary drainage is a procedure in which a small plastic tube
(drain) is inserted into the liver through the skin to drain the bile. It is sometimes combined with taking a picture of the bile ducts to see where the blockage might be. This is known as a percutaneous transhepatic cholangiogram (PTC).

WHY DO YOU NEED A PTC AND DRAIN?

Biliary drainages are typically performed because you have become jaundiced (yellow) and extremely itchy. This is because the bile cannot flow normally into the gut and the condition makes you susceptible to infection. The most common reasons for this are gallstones and pancreatic masses, although there are other causes.
Other imaging that you probably have had performed, such as an ultrasound scan or a computed tomography (CT) scan, will have shown that there is a blockage or leak within the bile ducts. The doctors looking after you have decided that you need a PTC and drainage to obtain more information about your liver problem. The information gained will help the doctors plan the treatment of your condition.

ARE THERE ANY RISKS?

PTC and drainage is a safe procedure, but as with any medical procedure there are some risks and complications that can arise.
If the bile is infected, although you may be on antibiotics, there is a small risk that infection might be released into your bloodstream, making you unwell for a period.

There is a risk of bleeding, though this is generally very slight. If the bleeding were to continue, then it is possible that you might need a blood transfusion. Very rarely, an operation or another radiological procedure is required to stop the bleeding.

WHO HAS MADE THE DECISION?

The consultant in charge of your care and the interventional radiologist performing the procedure have discussed your case and feel that this is the best option. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

ARE YOU REQUIRED TO MAKE ANY SPECIAL PREPARATIONS?

A PTC and drainage is usually carried out as a day case procedure under local anaesthetic. You may be asked not to eat for four hours before the procedure, although you may still drink clear fluids such as water.
If your blood clotting is abnormal, you may be given special blood transfusions to try and correct this. If you have any concerns about having blood transfusions, you should discuss these with your doctor.
If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before you have the test.

WHO WILL YOU SEE?

A specially trained team led by an interventional radiologist within the radiology department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

WHERE WILL THE PROCEDURE TAKE PLACE?

In the angiography suite or theatre; this is usually located within the radiology department. This is similar to an operating theatre into which specialised X-ray equipment has been installed.

WHAT HAPPENS DURING THE PROCEDURE?

Before the PTC and drainage, the interventional radiologist will explain the procedure and ask you to sign a consent form. Please feel free to ask any questions that you may have and, remember that even at this stage, you can decide against going ahead with the procedure if you so wish.

You will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) will be placed into a vein in your arm. You may receive a sedative to relieve anxiety, as well as an antibiotic. You will lie on the X-ray table, generally flat on your back. You may have monitoring devices attached to your chest and finger and may be given oxygen.

The procedure is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure. The procedure is performed using local anaesthetic and often sedation. The skin at the side of your abdomen will be swabbed and covered with sterile towels. Local anaesthetic will be injected into the skin to numb the area. Once the skin is numb, a small needle is inserted into the bile ducts. A small amount of dye (contrast agent) is injected to allow images to be taken of the ducts. Once the interventional radiologist has enough information, a drain will be left in place and connected to an external drainage bag.

WILL IT HURT?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. When the catheter is placed in the liver, you may get a dull ache in the right shoulder.

HOW LONG WILL IT TAKE?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about an hour.

WHAT HAPPENS AFTERWARDS?

You will be taken back to your ward. Nursing staff will carry out routine observations including pulse and blood pressure and will also check the treatment site. You will generally stay in bed for a few hours, until you have recovered. Once the bile has been drained into the bag, your jaundice (yellow colour) and itching will improve and you will feel much better.

WHAT HAPPENS NEXT?

This depends a little on what the cause of the blockage is but it is likely that you will have a second picture taken of the bile ducts. This will be to check whether after draining all the bile the narrowing or blockage can be opened. This may be with a small plastic tube or metal tube (stent). You may have an endoscopy to treat the blockage or possibly an operation. The doctors looking after you on the ward will be able to discuss this with you.

FINALLY

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure.

CONTACT

British Society of Interventional Radiology
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LEGAL NOTICE

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists. Approved by the Board of the Faculty of Clinical Radiology: 25 February 2020