

Percutaneous transhepatic cholangiogram (PTC) and drainage

Radiology Department Patient Information Leaflet

Introduction

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 drainage?

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 of time.

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 for another radiological procedure is required to stop the bleeding. There can be a risk to life, but again, this is very rare.

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?

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 procedure.

Who will you see?

You will be seen by 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?

The procedure will take place in the interventional theatre, 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 you 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 your 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 your pulse and blood pressure, and they 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 coloured skin) 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 of the 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.

X-ray precautions

The procedure uses X-rays, and these use a small amount of radiation which may add slightly to the normal risk of cancer. Your doctor thinks that the benefit of the examination outweighs the risks. However, if you are concerned about these possible risks, please discuss these with this doctor.

For more information, visit:

<https://www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance>

If you are a female patient, you must tell us if you are or might be pregnant before you attend for your scan.

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

The British Society of Interventional Radiology

www.bsir.org

Department of Radiology
Russells Hall Hospital
West Wing, Ground Floor
Pensnett Road
Dudley
West Midlands
DY1 2HQ

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

The Radiology Department

Russells Hall Hospital switchboard number: 01384 456111

This leaflet can be downloaded or printed from:

<http://dgft.nhs.uk/services-and-wards/radiology>

If you have any feedback on this patient information leaflet, please email dgft.patient.information@nhs.net

This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.

للحصول على هذه النشرة بحجم أكبر، وعلى شكل إصدار صوتي و بلغات أخرى، الرجاء الاتصال بالرقم 08000730510.

此宣传单可提供大字版本、音频版本和其它语言版本，请拨打电话：0800 073 0510。

Ulotka dostępna jest również w dużym druku, wersji audio lub w innym języku. W tym celu zadzwoń pod numer 0800 073 0510.

ਇਹ ਪਰਚਾ ਵੱਡੇ ਅੱਖਰਾਂ, ਬੋਲ ਕੇ ਰੀਕਾਰਡ ਕੀਤਾ ਹੋਇਆ ਅਤੇ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਵਿਚ ਵੀ ਪ੍ਰਾਪਤ ਹੋ ਸਕਦਾ ਹੈ, 0800 073 0510 ਤੇ ਫੋਨ ਕਰੋ ਜੀ।

Aceasta broșura poate fi pusă la dispoziție tipărită cu caractere mari, versiune audio sau în alte limbi, pentru acest lucru va rugăm sunați la 0800 073 0510.

یہ کتابچہ آپ کو بڑے حروف کی لکھائی، سمعی صورت اور دیگر زبانوں میں مہیا کیا جا سکتا ہے۔ برائے مہربانی فون نمبر 08000730510 پر رابطہ کریں۔