PTC
(Percutaneous Transhepatic Cholangiogram)
Biliary Drain Insertion,
Biliary Dilatation and
Biliary Stent Insertion

Information for patients undergoing PTC

Introduction

This booklet tells you about the procedure known as ‘Percutaneous Transhepatic Cholangiography’. It explains what is involved and what the possible risks are.

What is a PTC?

A PTC is an examination of the bile ducts using special x-ray techniques. PTC stands for Percutaneous Transhepatic Cholangiography.

Why do I need it?

Your doctor has requested a PTC to help to diagnose what is wrong with you and to decide on the best form of treatment for your condition. The procedure examines the bile ducts and drainage system of the liver.

What are the likely benefits?

- Diagnosis of your condition
- Either temporary or permanent treatment of bile obstruction
What are the risks?

Complications are rare, but you may have:

- Mild pain after the procedure, but you will be prescribed painkillers for this.
- Infection can occur in the bile ducts but antibiotics are usually given to help prevent this. Rarely if there is a lot of infection in the bile duct you could develop sepsis (serious infection in the body) after the procedure. Antibiotics should limit this.
- Haemorrhage or bleeding, but this is uncommon.

Who will be performing the PTC?

A doctor called an Interventional Radiologist who has been specially trained in using x-ray and scanning equipment will perform the procedure.

Where will the procedure take place?

In the x-ray department in an interventional suite which is adapted for these specialised procedures.

Is there any preparation?

The staff on the ward will help you to prepare for this examination.

- The doctors will take a blood sample from you and send this to the laboratory for testing
- The day before the procedure an intravenous line will be inserted into a vein in your arm and intravenous fluids (a drip) will be started
- You will not be able to eat or drink from midnight the night before your procedure
- You may be given some antibiotics orally or intravenously
- You will be asked to change into a hospital gown on the day of your procedure
- You will be asked to lie on a special blue transfer sheet on your bed ready for your procedure

What happens during the procedure?

- The Interventional Radiologist will explain the procedure to you before asking you to sign the consent form
- You will be asked lie on your back on an x-ray table
- A nurse will take your details and attach a monitor so she can record your blood pressure, pulse etc and you will be given some oxygen
- You will be given sedation and pain relief as needed, which will make you sleepy and relaxed, but you will still be able to communicate with the nurse and Interventional Radiologist
- The Interventional Radiologist will clean the skin with antiseptic to help avoid infection. We will keep everything as sterile as possible; you will have part of your body covered with a sterile towel.
- An ultrasound and x-ray camera will be used to find the best position for the procedure
• The skin and deeper tissues will be anaesthetised with a local anaesthetic; this will sting briefly before the tissues go numb
• The ultrasound and x-ray camera is then used to help the Interventional Radiologist locate the bile ducts, so that contrast media can be injected into them, and seen on the TV monitor

What are the possible outcomes of the procedure?

• It may not be possible to place a tube in the bile ducts; therefore other imaging techniques may need to be considered
• If you had this procedure in order to diagnose a condition then you will not need any further treatment at this time
• If you were found to have a narrowing in one or more of the ducts you will require further medical treatment such as:-
  o A drainage catheter placed across the narrowing
  o Dilatation therapy to the area that is narrowed
  o A stent device placed across the narrowing

Biliary drainage

A small plastic catheter (drain) is placed internally across the narrowed duct, with the external end connected to a drainage bag. The catheter is secured to your skin with stitches and a dressing. The ward nurse will measure the volume of bile drained. Your doctor will decide when to remove the drain.

Biliary dilatation

A thin plastic catheter with a balloon attached to the end is positioned across the narrowing (stricture in the bile duct). A special inflation device is used to expand the balloon. This action crushes any debris against the wall of the bile duct. The balloon will be inflated a few times and then removed. A drainage catheter may be left in place for a few days or longer if needed.

Biliary stenting

A metallic or plastic tube called a stent is placed across the stricture. The stent is mounted on a thin plastic catheter, when released the narrowing will expand at body temperature.

How long will it take?

Every patient’s situation is different, and it is not always easy to predict how difficult the procedure will be. The procedure may take between one and two hours.
Will it hurt?

The local anaesthetic may sting briefly and after that all you should feel is touch and pressure in the area where the Interventional Radiologist is working. Generally placing the catheter into the liver only takes a short time, and once in place it should not hurt at all. There will be a nurse looking after you. If the procedure does become uncomfortable for you, then she will arrange for you to have more painkillers and sedation.

What happens afterwards?

You will be taken to your ward on your bed. Nursing staff will monitor your blood pressure, pulse, drain site etc, to make sure that there are no problems. You will generally stay in bed for a few hours until you have recovered. You can eat and drink normally, or as instructed by your nurse.

If the drainage catheter has been left in your body for the time being then it will be attached to a collection bag. It is important that you try and take care of this. You should try not to make any sudden movements, for example getting out of the chair, without remembering the bag, and making sure that it can move freely with you. It may need to be emptied occasionally, so that it does not become too heavy, and the nurses will want to measure the amount in it each time.

The colour of the bile may change, it may be clear or green initially but as the liver function improves it will change to yellow.

Consent

Informed consent will be obtained prior to the procedure. Staff will explain all the risks, benefits and alternatives before asking you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to speak with a senior member of staff.

Finally…

We hope that you have found this leaflet useful. If you have any questions or you are worried about anything, please ask to speak to your ward doctor or:

Radiology Sister: 01305 255276

Further information can be found at the British Society of Interventional Radiology
www.bsir.org/patients

Make sure you are satisfied that you have received enough information about the procedure, before you sign the consent form.

You can also contact NHS direct 24 hours a day on:
0845 46 47 or www.nhsdirect.nhs.uk
Information Booklet: PTC

Getting feedback from our patients is important. Your answers can help us to monitor information we give you, to ensure it meets a high and consistent standard at all times.

Could you please take a few moments to complete this form, all responses are in confidence. Thanks you - your time is very much appreciated.

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Please return this completed form to:

Radiology Sister
Diagnostic Imaging
Dorset County Hospital
NHS Foundation Trust
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Dorchester
Dorset   DT1 2JY