

Having a Transjugular Liver Biopsy

Information for Patients

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Introduction

This leaflet tells you about having a transjugular liver biopsy. It explains what is involved and what the possible risks are.

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

What is a transjugular liver biopsy?

A liver biopsy is a procedure that involves taking a tiny specimen of the liver for examination under a microscope. In most cases, a liver biopsy is taken through the skin by passing a fine needle through into the liver.

A transjugular liver biopsy (TJLBx) is an alternative way of obtaining the liver specimen by passing the needle through the vein in the neck (jugular vein) to one of the veins in your liver (hepatic veins). This method is used in patients who have abnormal clotting of the blood or fluid collecting within abdomen. This technique is to reduce the risk of bleeding from the surface of the liver after the biopsy.

Why do I need a transjugular liver biopsy?

The doctors looking after you have decided that you need a liver biopsy to obtain more information about your liver problem. The information gained from the biopsy will help the doctors in the treatment of your condition. The consultant in charge of your care and the interventional radiologist performing the procedure have discussed your case and feel that a transjugular liver biopsy is the best way to obtain this information.

Are there any risks?

Transjugular liver biopsy is a safe procedure, but as with any medical procedure there are some risks and complications that can arise. The overall risk of a problem requiring further treatment is low (1–2%).

The main risk is bleeding after the biopsy. However, a transjugular liver biopsy has a lower risk of bleeding than a conventional liver biopsy taken through the side of the abdomen.

What do I need to do to prepare for the procedure?

Your blood clotting can be abnormal if you have a liver abnormality. You will need to have a blood test before the procedure to check this. Your doctor or clinical nurse specialist will tell you about this and how to arrange it. You may need to have an injection of vitamin K or special transfusions to correct blood clotting before the procedure. If you have any concerns about having blood transfusions, you should discuss these with your doctor.

If you are taking Warfarin, Clopidogrel, aspirin or other blood thinning medications please inform the Radiology department at least one week before the procedure, as these may need to be stopped for a number of days before the examination. Please continue to take all your other medications as usual.

You may already be an inpatient or, if not, you will be admitted into hospital on the day of your procedure. On admission you will be informed of the approximate time of your procedure. However, this may change due to unforeseen circumstances.

A doctor will go through your medical history and explain the procedure answering any questions you or your family may have. When all your questions have been answered you will be asked to sign a consent form for the procedure.

You will not be allowed to eat for 4 hours or drink for 2 hours before the procedure. If you are a diabetic your blood sugar levels will need to be monitored to ensure they remain within stable limits.

A cannula (needle) will be inserted into a vein in your hand/arm. This allows us to administer antibiotics to minimise the risk of infection.

Before the procedure you will be asked by the ward staff to change into a hospital gown. It is not necessary to remove hearing aids, dentures, glasses or jewellery for the procedure. However, just before you leave the ward, empty your bladder so that you will be comfortable during the procedure.

What happens before the procedure?

When it is time for the procedure you will be taken on your bed to the Radiology department, where you will be welcomed by the radiology staff:

- The Radiologist is a doctor specially trained to interpret X-rays and scans and to perform image-guided procedures.
- Radiographers are specially trained health professionals who move and control the radiographic equipment during the procedure.
- Radiology Nurses work with the radiologists and care for the patient during interventional procedures.

A nurse will check your details. Please tell the nurse if you have asthma, or are allergic to any medications, skin cleaning preparations, iodine or the contrast medium (special dye used to highlight blood vessels on X-rays) used for the procedure.

The radiologist will explain the procedure answering any questions you or your family may have. When all your questions have been answered you will be asked to sign a consent form for the procedure.

What happens during the procedure?

You will be taken into the Interventional radiology room and helped onto the X-ray table. The radiologist will perform an ultrasound scan of the neck to locate the jugular vein before starting the procedure.

You will have a device attached to your finger to monitor your heart rate and breathing. A cuff will be placed on your arm to monitor your blood pressure (please inform the nurse if there is a reason why a certain arm cannot be used). You may be given oxygen via a mask or tubing under your nose.

You may be given a sedative and painkillers through the cannula in your hand/arm. You will not be fully unconscious during the procedure but you should be drowsy and relaxed.

The skin at the side of your neck will be cleaned with antiseptic fluid and covered with a sterile drape (towel). The radiologist will give you an injection of local anaesthetic to numb the area. This may cause some stinging, but it will only last a short time. A fine needle will be passed through the skin into the neck vein under ultrasound guidance.

An X-ray camera suspended over the table will be used to take images during the procedure. It will come close to you but will not touch you. This is used to guide the passage of a small tube (catheter) through the veins to your liver. Once the catheter is in the liver, X-ray dye (contrast medium) will be injected through the needle and pictures will be taken. You may experience a warm sensation throughout your body. This is normal and wears off quickly. You may be asked to hold your breath and keep still while X-ray pictures are taken.

A biopsy needle is passed through the vein to the liver and usually one to three small samples of liver tissue are obtained. When the catheter is placed in the liver, you may get a dull ache in the right shoulder. This will go away once the tube has been removed. Some people feel a sharp pinch inside the abdomen as the biopsy is taken, but this will only last 1–2 seconds.

When the procedure is finished the radiologist will remove the tube and press on the neck for about 5-10 minutes in order to stop any bleeding.

The procedure usually takes approximately one hour.

What happens when the procedure is finished?

You will be taken back to your ward, where you will need to rest in bed for about 6 hours. You will have your pulse, blood pressure and if necessary your temperature taken to ensure there have been no complications.

You can eat and drink normally unless instructed otherwise by your doctor. Assuming you are feeling well, you will normally be discharged the same day.

How will I get my results?

The biopsy specimens will be sent for examination. Once the results are available, your doctors will discuss these with you.

Any questions?

We will do our best to make your visit as comfortable and stress free as possible. If you have any questions or suggestions for us, please contact the Interventional Radiology department on 01225 824375.

More information

For general information about Radiology departments, visit The Royal College of Radiologists' website: <https://www.rcr.ac.uk/public-and-media/what-expect-when>

For information about the effects of x-rays read the National Radiological Protection Board (NRPB) publication: 'X-rays how safe are they?' on the website: http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1194947388410

How do I make a comment about my procedure?

If you have any concerns or suggestions following your procedure, please contact the [Patient Advice and Liaison Service \(PALS\)](#),
Royal United Hospital Bath NHS Trust, Combe Park, Bath BA1 3NG.
Email: ruh-tr.PatientAdviceandLiaisonService@nhs.net
Tel: 01225 821655 or 01225 826319