

# Transjugular liver biopsy

## Radiology Department



[Patient information leaflet](#)

This leaflet tells you about the procedure known as a transjugular liver biopsy. It explains what is involved and the possible risks.

**The benefits and risks of this procedure should already have been explained to you by your doctor. If you have any concerns about the procedure, you should discuss these with your consultant prior to being admitted. You will have an opportunity to ask the radiologist any other questions you may have. Please make sure you do this before you sign the consent form.**

## The Radiology Department

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The radiology department may also be called the x-ray department or diagnostic imaging department. It is the facility in the hospital where radiological examinations of patients are carried out, using a range of equipment.

## Who does what?

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**Radiologists** are specialist doctors trained to interpret x-rays and carry out more complex examinations.

They are supported by **specialist radiographers**, who are highly trained to carry out x-rays and other imaging procedures.

**Radiology nurses** are specialist nurses who will assist the radiologist and care for you throughout the procedure until you are handed back to the ward nurses.

Prior to this procedure being performed, the radiologist will explain fully the whole procedure and you will have the opportunity to ask any questions you have regarding the procedure.

A written consent will be required. (You should have sufficient explanation before you sign the consent form).

## What is a transjugular liver biopsy?

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A liver biopsy is a procedure that involves taking a tiny sample of the liver so that it can be examined under a microscope. In most cases, a

liver biopsy is taken through the skin by passing a fine needle through it and into the liver.

A transjugular liver biopsy is an alternative way of obtaining the liver specimen by passing a needle through the vein in the neck (jugular vein) and then passing a catheter over this needle, through the blood vessel and then into the liver. This method is used in patients who have abnormal clotting of the blood, or fluid collecting within abdomen. This technique is used to reduce the risk of bleeding 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.

## Who has made the decision?

The consultant in charge of your case, and the radiologist carrying out the biopsy, will have discussed the situation, and feel that this is the best treatment option. However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

## How do I prepare for transjugular liver biopsy?

You need to be an inpatient in the hospital. You will have been allocated a bed on either the Surgical Short Stay Unit (SSSU), the Day Surgery Unit (DSU) or the Medical Day Unit (MDU). The location will be written on the appointment letter accompanying this patient information leaflet.

You will be asked to **attend the ward three hours** prior to your appointment to allow bloods to be taken so the results are available before the procedure. **You will be asked not to eat for six hours** but you can drink water up to two hours prior to the procedure, unless otherwise advised.

You will be asked to put on a hospital gown and a cannula (a small plastic tube) will be inserted into a vein on the back of your hand.

If you have any **allergies**, you **must** let the staff looking after you know. If you are taking any tablets or other medication please take them at the usual time.

If you are taking Warfarin or Aspirin or if you have previously reacted to intravenous contrast medium (x-ray dye) please phone us before your appointment.

**Ladies** – if you are pregnant, or think you may be pregnant, please phone us before your appointment. We may need to change or cancel your appointment.

## Can I bring a relative or friend?

Yes, but for safety reasons, they will not be able to accompany you into the x-ray room, except in very special circumstances.

You will need someone to collect you and drive you home after your required amount of bed rest, and someone to stay with you overnight.

## What actually happens during a transjugular liver biopsy?

You will be brought to the x-ray department from your ward, where you will meet the team and discuss the procedure with the radiologist, and sign your consent form.

You will need to lie flat on your back on the x-ray table. You may also have a monitoring device attached to your chest and finger, and may be given oxygen through a mask.

The radiologist will keep everything as sterile as possible, and will wear a theatre gown and operating gloves. The skin on your neck will be swabbed with antiseptic, and then most of the rest of your body covered with a theatre towel. The skin and deeper tissues over the vein will be injected with local anaesthetic to make the area numb, and then a needle will be inserted into the large vein in the neck under ultrasound guidance.

Once the radiologist is satisfied that the needle is correctly positioned, a guide wire is placed through the needle, and into the vein. The needle is then withdrawn, allowing a fine plastic tube, called a catheter, to be placed over the wire and into the vein. The catheter will be passed from this vein into a vein in your liver, and approximately three biopsies will be taken. Following this, the catheter will be removed and the radiologist will apply pressure on the puncture site for a few minutes to reduce bleeding.

## **Will the procedure hurt?**

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When the local anaesthetic is injected, it will sting to start with, but this soon passes, and the skin and deeper tissues should then feel numb. After this, the procedure should not be painful.

## **How long will the procedure take?**

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Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. Generally, the procedure will be over in about half an hour, but you may be in the x-ray department for about an hour or so.

## **What happens afterwards?**

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You will be taken back to your ward on a trolley or a bed. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no untoward effects. They will also look at the skin entry point to make sure there is no bleeding from it. You will generally stay in bed for a few hours, until you have recovered. All being well, you will be allowed home on the same day.

## **Are there any risks or complications?**

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Transjugular vein liver biopsy is a very safe procedure. The main risk is bleeding, but the risk is much lower with this procedure than with a biopsy taken through the skin. Occasionally, a small bruise, called a haematoma, can form around the site where the needle has been inserted, but this would not be unexpected or worrying.

Low dose radiation is used during the procedure, but your consultant has decided that the benefits of having the procedure done are greater than any potential risk of exposure to radiation. The radiation dose you receive will be kept as low as possible.

## **What are the benefits of this procedure?**

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The biopsy will provide valuable information to aid in your treatment.

## **Is there an alternative procedure?**

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Percutaneous (through the skin) liver biopsy. However this is not a preferred method where there is abnormal clotting or fluid in the abdomen.

## **What other advice do we recommend after this procedure?**

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- Rest when you get home. Do not take up any strenuous tasks for a few days.
- Avoid lifting anything heavy for 48 hours, while you are recovering from the procedure.
- Return to work when you feel able.

## **How do I get the results?**

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The biopsy will be sent to the laboratory for analysis. Please make an appointment to see your consultant between two and four weeks after the procedure to discuss the results.

## Privacy and dignity

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Sometimes tests or procedures, although necessary, can be embarrassing or undignified for patients but we will endeavour to do everything we can to make you as comfortable as possible during your visit to the department.

## Questions and contacts

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If you have any questions or would like to know more about this procedure, please telephone the Interventional Suite Radiology Department.

**Telephone:** 01483 571122 ext 4596

For further information about Diagnostic Imaging Services at Royal Surrey County Hospital NHS Foundation Trust, please contact:

### **Royal Surrey County Hospital NHS Foundation Trust**

Egerton Road

Guildford

Surrey

GU2 7XX

**[www.royalsurrey.nhs.uk](http://www.royalsurrey.nhs.uk)**

## Reference source

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[www.bsir.org/media/resources/BSIR\\_Patient\\_Leaflet\\_-\\_Transjugular\\_Liver\\_Biopsy.pdf](http://www.bsir.org/media/resources/BSIR_Patient_Leaflet_-_Transjugular_Liver_Biopsy.pdf)

## Other sources of information

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### **Information on radiation**

[www.gov.uk/government/publications/ionising-radiation-dose-comparisons/ionising-radiation-dose-comparisons](http://www.gov.uk/government/publications/ionising-radiation-dose-comparisons/ionising-radiation-dose-comparisons)

## **Radiology Department contact details**

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If you have any questions or would like to know more about this procedure, please telephone the Interventional Suite Radiology Department.

**Telephone:** 01483 571122 **ext** 4596

**If you are unable to keep your appointment, please contact us as soon as possible.**

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## **PALS and Advocacy contact details**

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Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

**Telephone:** 01483 402757

**Email:** [rsc-tr.pals@nhs.net](mailto:rsc-tr.pals@nhs.net)

**Opening hours:** 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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