

Taking a sample of your liver by a needle through the skin (percutaneous liver biopsy)

Department of Radiology

Information for Patients

Produced: November 2021

Review: November 2024

Leaflet number: 80 Version: 5

Introduction

This leaflet tells you about your examination. Please read it carefully as it contains important information and instructions.

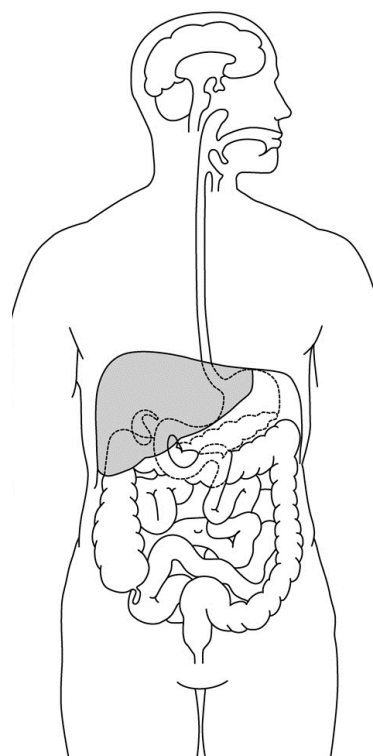
What is a percutaneous liver biopsy?

A biopsy involves taking a small sample of body tissue so it can be examined under a microscope by a pathologist. Pathologists are experts in making a diagnosis from tissue samples.

Percutaneous means 'through the skin'. A biopsy of the liver can be done through a tiny cut in the skin without the need for an operation.

Why do I need a liver biopsy?

Your doctors suspect that there may be an abnormality in your liver. They feel that the best way to find out exactly what the abnormality is will be to take a tiny piece of it away for a pathologist to examine.



**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

Asking for your permission (consent)

The doctor who referred you should have talked to you about the reasons for this procedure and any other options.

You have been referred to a hospital doctor or a Radiologist for this procedure. Radiologists are doctors who have specialised in imaging and X-ray treatments. They will confirm that you understand why the procedure is being done, its potential risks and what the chances of success are. You will then be asked to sign a consent form to confirm this. **You should feel that you have had enough explanation before you sign the consent form.**

If after talking to the hospital doctor or Radiologist you do not want to have the procedure then you can decide against it at any time. If you feel during the procedure that you do not want it to continue we will explain the implications of not doing so to help you fully decide.

If the Radiologist feels that your condition has changed they will talk to you about whether the procedure is still needed. They may then ask you to return to your referring doctor for review.

Do I need to take my normal medicines?

If you are on medication from your doctor please continue to take it as normal unless you are on blood thinners or take medication for diabetes.



Information for patients taking blood thinning medication:

If you are taking medication that thins the blood (anticoagulants or antiplatelets) please call the radiology department for advice, as soon as possible, by phoning the number on your appointment letter.

Common examples of these drugs include aspirin, warfarin, clopidogrel (Plavix®), apixiban (Eliquis), rivaroxaban (Xarelto), ticagrelor (Brilinta), Dalteparin and Heparin. If you are on Dalteparin or Heparin injections then these need to be stopped for 24 hours before your procedure.

You will be asked what blood thinning medication you are taking, how much you take (the dose), and what you are taking it for.

Information for patients with diabetes

If you have diabetes you may need to adjust your diabetes medication. Please discuss the eating and drinking instructions in this leaflet with your normal diabetes care provider.



Important information

Please tell the X-ray staff when you arrive if:

- **You are allergic to rubber (latex), have any other allergies or have asthma.**
- **You have diabetes.**
- **There is any possibility that you may be pregnant.**



How do I get ready for the biopsy?

- Do not eat anything for 4 hours before your biopsy
- Do not drink anything for 1 hour before your biopsy.



The procedure can be done as an inpatient (overnight stay in hospital) or as a day-case. This will depend on your health and home circumstances.

What happens during the procedure?

- Before the biopsy you are asked to put on a hospital gown. A needle is put into a vein in your arm, either on the ward or when you arrive for your biopsy. This is so that you can be given medication if necessary.
- The biopsy takes place in the Radiology department. You lie on the X-ray or scanning table in the position that the radiologist decides is best. It is important that you stay very still in this position until the procedure is over. If you are uncomfortable please let the doctor know. You are attached to a blood pressure monitoring machine and have a small monitoring device (peg) attached to your finger to check your heart rate (pulse).
- Everything is kept clean (sterile). Your skin is cleaned with antiseptic and you have some of your body covered with sterile sheets.
- An ultrasound machine or CT scanner is used to decide on the best place for inserting the biopsy needle.
- Your skin and deeper tissues are numbed with local anaesthetic. When the local anaesthetic is injected it stings to start with, but this soon wears off and the skin and deeper tissues should then feel numb. If the procedure does become uncomfortable you should tell the member of staff who will be with you during the procedure.
- The radiologist uses the ultrasound or CT scan to guide the biopsy needle through a tiny cut in the skin into the abnormal tissue. You may feel a pushing sensation when the biopsy needle is put in. It should not be painful. If you do feel pain you should tell the Radiologist and they may give you more local anaesthetic. You may be asked to hold your breath for a few seconds as the sample is taken.
- You should usually not be aware of any pain from the biopsy needle, but you may feel a little pressure and hear a clicking sound when the biopsy sample is taken. The doctor may ask to take 2 or 3 biopsy samples. Sometimes, it may not be possible for the doctor to remove liver tissue from the area that we need it from. If this is the case it will be explained to you.



How long will the procedure take?

- Every patient's situation is different. It is not always easy to know how complex or how straightforward the procedure will be.
- The first part of the procedure when the equipment is being prepared may seem to take a while but doing the biopsy itself does not take very long at all.

Will it hurt?

You may feel some pain or discomfort. When the local anaesthetic is injected it stings to start with, but this soon wears off and the skin and deeper tissues should then feel numb.

Later you may feel a pushing sensation as the biopsy needle is put in position, but this is generally done so quickly that it does not cause much discomfort. If the procedure does become painful you should tell the person doing the procedure.

What happens after the procedure?

You will be taken back to your ward or a day case clinic. Nurses will carry out routine observations, such as taking your pulse, blood pressure and temperature, to make sure that there are no problems. They will also look at the skin entry point to make sure there is no bleeding from it.



You usually need to stay in bed for a few hours until you have recovered. You may be allowed home on the same day, or kept in hospital overnight. If you have any problems after the procedure please speak to the staff on the ward or your radiology nurses.

You will need someone to drive you home.

How do I get the results?

The biopsy tissue is sent to the laboratory for a pathologist to examine. The results can not be given to you immediately. An explanation of how to get your results will be given to you after your biopsy.

What if I need to talk to someone after the procedure?

If you have any problems after the procedure please speak to the nurses and doctors looking after you on the ward or the radiology staff.

If you have any problems relating to your biopsy procedure once you have left hospital, please contact your GP for advice

Are there any risks or complications?

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet, although they are different for each person. Your risks will be discussed with you before you sign the consent form.

- **Discomfort** - 1 in 4 patients have discomfort which is usually dull, mild, may be worse during breathing, and lasts for only a short time (a few hours to less than 24 hours). Less commonly, patients have mild discomfort that lasts longer than 24 hours.
- **Low blood pressure** - low blood pressure or fainting may occur immediately after a biopsy. If the blood pressure stays low or gets lower, this can be a sign of bleeding.
- **Bleeding** - fewer than 1 in 320 patients will have significant bleeding after a biopsy, which usually shows within 3 to 4 hours. The bleeding often stops on its own, but if it persists a blood transfusion may be needed. Surgery or a procedure in which the bleeding site is found and treated (called angiography) may be needed if the bleeding is severe or does not stop on its own.
- **Bile peritonitis** - this is a condition where there is leakage of bile from the liver after a biopsy which can cause irritation of the lining of the abdomen. This happens in about 1 in 1000 (0.09 %) of patients. It usually gets better on its own. The gallbladder may need to be taken out with an operation if the leakage is due to gallbladder injury.
- **Infection** - between 6 and 14 patients in 100 get an infection. This is usually in patients with certain forms of liver disease such as primary sclerosing cholangitis. This is where bacteria is released into the blood as a result of the biopsy. Antibiotics are sometimes given for these patients to prevent an infection developing.
- **Perforation** - there is a chance that the biopsy needle can pierce organs that are close to the liver. These include the lungs, kidney, small intestine and gallbladder. Fortunately, this does not usually cause a serious problem. This can happen in up to 1 in 1000 cases.
- **Risk of death** - there is a risk of death following a percutaneous liver biopsy. This rate is between 1 and 3 patients in every 1000 percutaneous liver biopsies performed.

Are all biopsies successful?

Not all biopsies are successful. This may be because the piece of tissue has been obtained from normal tissue rather than the abnormal tissue. Or, the amount of abnormal tissue taken may not be enough for the pathologist to make a definite diagnosis. The radiologist doing your biopsy may be able to give you some idea as to the possibility of obtaining a satisfactory sample.

What if I need to talk to someone?

If you have any questions or concerns, or cannot make the appointment please call the radiology department on:

0116 258 8765 and select option 7. Monday to Friday 9am to 5pm.



اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
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Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

Previous reference: IMA071-0916

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk