

Having an Ultrasound Guided Liver Biopsy

Information for Patients

In this leaflet:

Introduction	2
What is an ultrasound-guided liver biopsy?	2
Why do I need a liver biopsy?	2
Are there any risks?	2
What do I need to do to prepare for the procedure?	3
What happens before the procedure?	3
What happens during the procedure?	4
What happens when the procedure is finished?	4
How will I get my results?	5
Any questions?	5
More information	5
How do I make a comment about my procedure?	5

Introduction

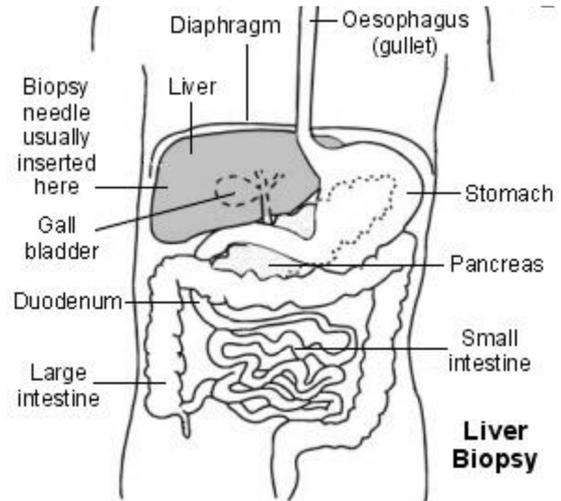
This leaflet tells you about having an ultrasound guided liver biopsy. It explains what is involved and what the possible risks are.

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 an ultrasound-guided liver biopsy?

A liver biopsy is a way of taking a tiny sample of the liver from your body, using a special needle passed through the skin. This allows the doctors to look at the sample under a microscope for signs of damage.

An ultrasound scanner uses high-frequency sound waves and computers to produce pictures of the organs and other structures inside the body, which can be viewed on a computer monitor. It can be used to see the passage of the biopsy needle into the liver.



Why do I need a liver biopsy?

Your doctor has decided that a liver biopsy is needed to look for signs of liver damage. This may be to make a diagnosis when a liver problem is difficult to diagnose with blood tests and diagnostic scans. Alternatively, a liver biopsy can help to assess the degree of damage from a known liver condition. This can help to guide treatment.

Are there any risks?

Ultrasound guided liver biopsy is generally a very safe procedure, but as with any medical procedure there are some risks and complications that can arise.

The risk of having excessive bleeding from the biopsy site is between 1 in 500 and 1 in 1,000. If bleeding occurs, a blood transfusion may be needed. To stop the bleeding the patient may have an x-ray guided procedure called embolisation in which the blood vessel causing the problem is sealed off. In some cases, surgery may be needed to stop the bleeding.

Other risks are much rarer and include puncture of other internal organs or infection. The risk of death as a consequence of a liver biopsy is between 1 in 10,000 and 1 in 12,000.

Unfortunately, some biopsies fail to give an answer. This may be because, despite taking every possible care, the piece of tissue which has actually been obtained is normal tissue rather than abnormal. Alternatively although abnormal tissue has been obtained, it may not be enough for the pathologist (an expert in making diagnoses from tissue samples) to make a definite diagnosis. The radiologist doing your biopsy may be able to give you some idea as to the chance of obtaining a satisfactory sample.

The radiologist performing the biopsy will discuss these risks with you and answer any questions you may have.

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

You will need to have a blood test a few days before the procedure to check that you are not at increased risk of bleeding and that it will be safe to take the biopsy. Your doctor or clinical nurse specialist will tell you about this and how to arrange it.

If you are taking Warfarin, Clopidogrel, aspirin or other blood thinning medications (such as Phenindione, Dabigatran, Rivaroxaban, Apixaban, Prasugrel), 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, may need to be admitted into hospital on the day of your procedure. An ultrasound guided liver biopsy is normally performed as a day case procedure. On admission you will be informed of the approximate time of your procedure. However, this may change due to unforeseen circumstances.

You may be asked not to eat for 4 hours before the procedure, although you can usually still drink clear fluids such as water. If you are a diabetic your blood sugar levels will need to be monitored to ensure they remain within stable limits.

What happens before the procedure?

The procedure will take place in the Radiology ultrasound department. 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.
- Radiology Nurses work with the radiologists and care for the patient during interventional procedures.
- Radiology Department Assistants (RDAs) are healthcare professionals trained to assist the radiologist in preparing and caring for patients undergoing scans and image-guided procedures.

An RDA or nurse will check your details. Please let them know if you are allergic to any medications or skin-cleaning preparations 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 ultrasound room and asked to lie on your back or left side with your right arm above your head. An ultrasound scan of the liver will first be performed to select the best site for the inserting the biopsy needle.

The skin over the liver 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. The biopsy needle will be passed through the skin into the abnormal tissue under ultrasound guidance. You may be asked to hold your breath and keep still while the biopsies are taken.

It may be necessary to perform 2-3 passes of the biopsy needle in order to obtain a sufficient tissue sample. You may feel some minor discomfort as the biopsy is taken.

Every patient is different, and it is not always easy to predict how long the biopsy will take; however, expect to be in the radiology department for about 30 minutes.

What happens when the procedure is finished?

You will be taken back to your ward, where you may need to rest in bed for 4- 6 hours. Initially you may be asked to lie on your right side to put pressure on the biopsy site and reduce any chance of bleeding. You will have your pulse, blood pressure and if necessary your temperature taken to ensure there have been no complications.

About 1 in 5 patients will experience some pain from having a liver biopsy. This may either be felt over the liver (right upper abdomen) or in the right shoulder. Simple pain relieving tablets are usually adequate to make things comfortable. It is very unusual for the pain to be severe enough to stop them from going home on the same day. Some soreness may persist for up to a week.

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. We would recommend you do not drive home after the procedure, and that you are accompanied. Please ensure you have arranged transport home prior to the biopsy, and bring the contact details with you.

It is sensible to avoid strenuous activity for two days following the biopsy but most patients are fully recovered after this time.

How will I get my results?

The biopsy specimens will be sent for examination. Typically it can take at least two weeks for the biopsy to be processed in the pathology laboratory and for a report to be sent to the doctor who arranged the procedure. 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 Ultrasound appointments on 01225 825529/825637.

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