

## R05 Liver Biopsy

### Further information

Get more information and references at  
[www.aboutmyhealth.org](http://www.aboutmyhealth.org)

You can get information locally from:

- Ealing Hospital main switchboard on 020 8967 5000
- Central Middlesex Hospital main switchboard on 020 8965 5733
- Northwick Park and St Mark's Hospitals main switchboard on 020 8864 3232
- Our website – [www.lnwh.nhs.uk](http://www.lnwh.nhs.uk)

### Patient Advice and Liaison Service (PALS)

PALS is a confidential service for people who would like information, help or advice about the services provided by any of our hospitals. To contact PALS:

- At Northwick Park, St Mark's and Central Middlesex Hospitals on 020 8869 5118 or email PALS at [LNWH-tr.PALS@nhs.net](mailto:LNWH-tr.PALS@nhs.net)

- At Ealing Hospital and community services on Freephone 0800 064 1120 or 020 8967 5221 between 9.30 am and 4 pm or email PALS at [LNWH-tr.ehPALS@nhs.net](mailto:LNWH-tr.ehPALS@nhs.net)

Please note that this service does not provide clinical advice so please contact the relevant department directly to discuss any concerns or queries about your upcoming test, examination or operation.

**For a translation of this leaflet or for an English version in large print, audio or Braille please ask a member of staff or call 0800 783 4372.**

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[www.pre-op.org](http://www.pre-op.org)

## What is a liver biopsy?

A liver biopsy involves removing small pieces of tissue from your liver using a needle. The procedure is performed by a radiologist (doctor who specialises in x-rays and scans) or a gastroenterologist (doctor who specialises in the digestive system).

Your doctor has recommended a liver biopsy. However, it is your decision to go ahead with the procedure or not.

This document will give you information about the benefits and risks to help you to make an informed decision. If you have any questions that this document does not answer, ask your doctor or the healthcare team.

## What are the benefits of a liver biopsy?

Your liver carries out many important functions, including producing bile to help you to digest food and cleaning your blood of drugs and chemicals (see figure 1). Your doctor is concerned that there may be a problem with your liver. You will already have had a blood test and a scan. Your doctor will tell you which of the following problems is most likely in your case.

- Inflammation (hepatitis) – This is usually caused by an infection.
- Cirrhosis – A condition where normal liver tissue gets damaged and is replaced by scar tissue.
- A tumour – A liver tumour may be benign (a growth that does not spread to other areas of your body) or a cancer.

The tissue that your doctor removes will be examined under a microscope to help make the diagnosis or help your doctor to decide the best treatment for you. If a problem is found, the healthcare team will discuss the appropriate treatment with you.

If the biopsy is normal, the healthcare team will reassure you.

## Are there any alternatives to a liver biopsy?

A blood test or scan may show that you have a problem. However, a biopsy will help to find out exactly what is causing the problem and will help your doctor to decide the best treatment for you.

## What will happen if I decide not to have a liver biopsy?

Your doctor may not be able to confirm what the problem is or decide the best treatment for you. If you decide not to have a liver biopsy, you should discuss this carefully with your doctor.

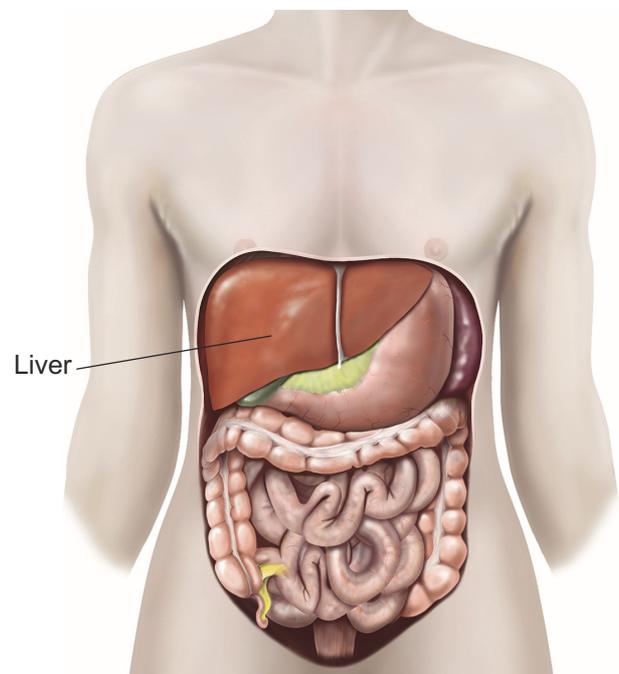


Figure 1  
The position of the liver

## What does the procedure involve?

### • Before the procedure

If you are female, the healthcare team may ask you to have a pregnancy test. They need to know if you are pregnant because x-rays are harmful to unborn babies. Sometimes the test does not show an early-stage pregnancy so let the healthcare team know if you could be pregnant. The healthcare team will carry out a number of checks to make sure you have the procedure you came in for. You can help by confirming to your doctor and the healthcare team your name and the procedure you are having.

The healthcare team will ask you to sign the consent form once you have read this document and they have answered your questions.

Do not eat in the two hours before the procedure. The healthcare team will take a blood sample from you to check that your blood clots normally. Your doctor may give you antibiotics or other medication. They will discuss this with you.

### • In the treatment room

A liver biopsy usually takes less than 30 minutes. If appropriate, your doctor may offer you a sedative or painkiller which they can give you through a small needle in your arm or the back of your hand.

The healthcare team will monitor your oxygen levels and heart rate using a finger or toe clip. If you need oxygen, they will give it to you through a mask or small tube in your nostrils. They will also monitor your blood pressure using a device that is strapped to your arm.

Your doctor will inject local anaesthetic into the area where the needle will be inserted. This stings for a moment but will make the area numb, allowing your doctor to perform the procedure with much less discomfort for you.

The two commonly-used techniques are ultrasound-guided liver biopsy and transjugular liver biopsy.

#### • **Ultrasound-guided liver biopsy**

Your doctor will ask you to lie on your back, with your right elbow out to the side and your right hand under your head. It is important that you keep as still as possible during the procedure.

Your doctor will make a small cut on the skin on your right side, usually between your lower ribs. They will insert the needle through the cut and into your liver to remove a small piece of tissue. They will often use an ultrasound scan to guide them while they perform the biopsy.

Your doctor will remove the needle and cover the cut with a small plaster.

#### • **Transjugular liver biopsy**

Your doctor will ask you to lie on your back. It is important that you keep as still as possible during the procedure. Your doctor will make a small cut on your skin on the right side of your neck and then insert a catheter (tube) into your jugular vein. They will use x-rays to help them guide the tube through your veins. When the tube reaches your liver, your doctor will pass a needle down the tube and into your liver. They will pass a special liquid through the catheter to check that the needle is in the right position. Your doctor will ask you to hold your breath while they remove a small piece of tissue. Your doctor will remove the needle and catheter and press gently on the side of your neck to close the cut.

#### **What should I do about my medication?**

Let your doctor know about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

#### **What complications can happen?**

The healthcare team will try to make the procedure as safe as possible but complications can happen. Some of these can be serious and can even cause death (risk: less than 1 in 1,000). The possible complications of a liver biopsy are listed below. Any numbers which relate to risk are from studies of people who have had this procedure. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

- **Pain.** The local anaesthetic and painkillers should help to keep you comfortable. If you have any pain during the procedure, let your doctor know. It is common to have some discomfort or a dull pain in your shoulders and back, which can usually be controlled with simple painkillers such as paracetamol.
- **Bleeding,** which usually stops on its own. Sometimes bleeding can be heavy and you may need a blood transfusion or further treatment (risk: less than 1 in 140 for a blood transfusion).
- **Inflammation of the lining of your abdomen (peritonitis),** if bile leaks from the biopsy site (risk: less than 1 in 1,000). You may need surgery to stop the leak.
- **Making a hole in nearby structures with the needle.** This does not usually cause any serious problems but you may need further treatment.
- **Allergic reaction to the equipment, materials or medication.** The healthcare team is trained to detect and treat any reactions that might happen. Let your doctor know if you have any allergies or if you have reacted to any medication or tests in the past.
- **Infection.** You may need treatment with antibiotics. Let your doctor know if you get a high temperature or feel unwell.

You should discuss these possible complications with your doctor if there is anything you do not understand.

#### **How soon will I recover?**

After the procedure you will be transferred to the recovery area where you can rest. You will be allowed to eat and drink after about 30 minutes. You may need to lie on your right side for two hours and then flat on your back. This reduces the risk of bleeding from the biopsy site by placing pressure on your liver.

The healthcare team will check you regularly for any signs of bleeding, usually for 6 hours.

You should be able to go home the same day. However, your doctor may recommend that you stay a little longer. If you were given a sedative and go home the same day, a responsible adult should take you home in a car or taxi and stay with you for at least 24 hours. Be near a telephone in case of an emergency. Make sure you are within an hour's drive of the hospital in case any complications happen. Do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination. You should also not sign legal documents or drink alcohol for at least 24 hours. If you develop a fever, have difficulty breathing, chills, dizziness, tenderness or severe pain at the site of the biopsy or in your chest, shoulder or stomach, contact the hospital. If you take blood-thinning medication, your doctor will tell you when you can start taking it again. Do not take aspirin for the first week. You should be able to return to work the next day unless you are told otherwise. Do not do strenuous exercise for one to two days. Results from the biopsy will not be available for at least a few days so the healthcare team may arrange for you to come back to the clinic for these results. The healthcare team will discuss with you any treatment or follow-up you need.

#### • Lifestyle changes

If you smoke, stopping smoking will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight.

Regular exercise should improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

#### Summary

A liver biopsy is usually a safe and effective way of finding out if there is a problem with your liver. However, complications can happen. You need to know about them to help you to make an informed decision about the procedure. Knowing about them will also help to detect and treat any problems early.

**Keep this information leaflet. Use it to help you if you need to talk to a healthcare professional.**

#### Acknowledgements

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