

Gastroenterology

What is a liver biopsy?

A liver biopsy is a test that involves taking a very small piece of your liver to send for further tests. Your doctor will explain to you why they think you need a liver biopsy.

What are the benefits of a liver biopsy?

The benefits of the test are that it can help your doctor to:

- identify the cause of any liver abnormalities
- find out if your liver is damaged
- assess how badly your liver is damaged
- find out if you have a liver infection
- plan your treatment

What are the risks of a liver biopsy?

Bleeding

Internal bleeding occurs after 1 in 200 liver biopsies as a result of a blood vessel near the liver being punctured. The bleeding usually settles by itself, but 1 in 4 of those patients who do bleed may need a blood transfusion. 1 in 500 of the patients who bleed needs an operation to stop the bleeding. To reduce the risk of this occurring, the doctor will check that your blood clots normally before the procedure. If it doesn't you will be given some blood factors (plasma) to help it clot, and in some cases may also need to be given platelets.

Injury to other organs

As the doctor is unable to see the whole liver when performing the biopsy, there is the possibility that the needle might injure other organs such as the gall bladder or, very rarely, the kidney or bowel. This happens in less than 1 in 1000 cases. Severe complications as a result of this are extremely rare.

What are the risks of not having a liver biopsy?

If you have been advised to have a liver biopsy and choose not to, your doctor may not be able to accurately diagnose your condition and treat it appropriately.

Are there any alternatives to a liver biopsy?

There is no alternative procedure that will give your doctor the same information as a liver biopsy, but there are various ways of performing it. A biopsy can be done through the side (percutaneous) or, if there are problems with the blood's ability to clot, through a long needle inserted through a small cut in the neck and, under x-ray guidance, passed into the liver.



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Preparing for your liver biopsy

Before you have your liver biopsy it is important that you understand what is involved and why it is being done as you will be asked to give written consent for the procedure. If you have any questions or concerns, please speak to your doctor who will be happy to explain things to you. If you are nervous, ask them about having sedation before the biopsy.

You also need to tell the doctor about any tablets you are taking and allergies you have (to tablets, plasters etc). If you are taking tablets containing Aspirin or Clopidogrel (Plavix), you should stop taking these 14 days before the procedure, but please speak to your doctor before stopping them.

It is sensible not to eat or drink much in the 3 hours before the liver biopsy and you should also go to the toilet before the biopsy.

Before the liver biopsy is done, you will have a blood test so the doctor can check that your blood is clotting well enough. If it is unsafe the doctor will not proceed with the biopsy.

During the liver biopsy

The procedure may be uncomfortable for you and you may experience some pain either at the site of the biopsy or in your right shoulder. This can usually be controlled by the local anaesthetic but if you are in pain please ask for further pain relief. The procedure itself only lasts for a few minutes. This is what happens:

- 1. The doctor will explain the procedure.
- 2. You will be asked to lie flat on your bed with your right hand under your head.
- 3. The doctor will work out exactly where your liver is by tapping your chest and tummy and performing an ultrasound scan it is normally situated on the right hand side just under the lower ribs.
- 4. He/she will then put some disinfectant on your skin and will anaesthetise the skin with a local anaesthetic. This may sting initially, then after 3-4 seconds your skin will go numb. Sedation is not routinely given.
- 5. You will be asked to hold your breath for a few seconds while the biopsy is taken. A needle will be inserted through your skin and a very small piece of your liver (about 1/50,000th of your liver) will be taken to send for further tests.

Sometimes a part of the biopsy may be left over after it has been tested, and you will be asked if you give your consent for this to be used in medical research. We would only do this with your written approval.



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After the liver biopsy

After the biopsy a plaster will be placed on the biopsy site and you will be asked to lie on the bed for at least 6 hours. During that time, the nurse will take your blood pressure and pulse. This will be every 15 minutes for the first 2 hours, then less frequently. You will still be able to eat and drink during this period but will not be allowed to get up and walk around.

Going home

You will usually be able to go home on either the same day as your biopsy or the next day.

Please arrange for someone to collect you from the hospital. You should rest on the evening of the biopsy. You will be able to resume your normal activities the following morning if you have not had any problems. It is important that you do not do anything strenuous for 36 hours after your liver biopsy and if you have received sedation you should not drive or operate machinery during this time.

You may experience some discomfort at the biopsy site which can usually be relieved by taking Paracetamol as instructed on the packet.

Follow-up

Please ask the doctor performing the biopsy what arrangements will be made for you to receive the results. Biopsy results can take up to 4 weeks to come through to the doctor.

Symptoms to report

If you experience severe pain following your liver biopsy please contact the ward you had your biopsy on for advice.

Contact details

If you have any questions or concerns about your liver biopsy please call:

Gastroenterology Nurse Specialists (Sandwell Hospital patients) 0121 507 3982

Monday-Friday, 8.30am - 4.30pm

Endoscopy (City Hospital patients)

0121 507 5318 Monday - Friday, 7.30am - 6.30pm



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Further information

For more information about liver tests and liver problems:

British Liver Trust www.britishlivertrust.org.uk 0800 652 7330

For more information about our hospitals and services see our website:

Sandwell and West Birmingham Hospitals NHS Trust www.swbh.nhs.uk

Sources used for the information in this leaflet

• British Society of Gastroenterology, 'Guidelines on the use of liver biopsy in clinical practice', October 2004

If you would like to suggest any amendments or improvements to this leaflet please contact the communications department on 0121 507 5420 or email: **swb-tr.swbh-gm-patient-information@nhs.net**



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