Liver biopsy

Information for patients

Hepatobiliary
What is a liver biopsy?

A liver biopsy is a procedure in which we remove a small sample of tissue from your liver and examine it under a microscope.

Why do I need it?

We are likely to have already done a number of blood tests and an ultrasound scan to look at your liver and these tests may help provide us with a diagnosis. We use liver biopsies to determine what stage a disease is at or how badly it is affecting the liver. This is something that we can’t always do from blood tests.

A liver biopsy will give us more information about what is wrong with your liver and help us decide on the best treatment for you.

In some cases treatment may not be available or needed, but the biopsy will still help us to get a clearer picture of what may lie ahead with regards to the functioning of your liver and may help to determine whether or not your liver condition needs continued monitoring.

Where will I have my biopsy?

Most people can have the biopsy done as a day case patient, which involves staying at the hospital for about 8 hours. Some people will need to stay overnight. This includes people with blood clotting problems, other health problems and those people who have no one to stay with them overnight at home.
Preparing for your biopsy

You will be admitted to a ward or investigation unit for your biopsy. A doctor will explain the reasons for the biopsy and ask you to sign a form before you have the biopsy. As with any procedure we must seek your consent beforehand. Your doctor will explain the risks and benefits of the operation with you, though please do not hesitate to ask for further information if there is anything you don't understand.

Before coming for your biopsy you should tell your doctor if you are taking any medicines, especially Warfarin, Aspirin, Clopidogrel or drugs for arthritis. We may need to stop these for a while before the biopsy as these drugs can thin the blood and could increase the risk of bleeding after the biopsy.

Before you have your biopsy, we will do a blood test to find out your blood group. You will need to fast (have nothing to eat or drink) for 4 hours before the procedure.
How is the liver biopsy done?

There are two main ways to obtain a liver biopsy.

1. Percutaneous method (through the skin):

The most common method of taking a liver biopsy is through the skin. To do this, the doctor will give you a local anaesthetic injection to numb the skin over the liver on your right side; we will then pass a needle into your liver and take the biopsy. The procedure only takes a few seconds.

The whole procedure is usually performed using an ultrasound or CT scan in the X-ray Department to help direct the biopsy needle to the right place. It is sometimes necessary to take more than one biopsy if the first sample is too small. Afterwards you will need to remain lying down for 4 hours and the nurses will take regular measurements of your pulse and blood pressure.

2. Transjugular liver biopsy:

For some people the percutaneous method of doing a biopsy is risky because they have poor blood clotting or excess fluid around the liver. For people with these problems, we would use the transjugular approach to biopsies. This technique involves giving you a local anaesthetic in your neck then putting the biopsy needle into a vein in the side of your neck. Using X-rays to guide us, we then pass the biopsy needle down through the blood vessels to the liver and take the biopsy from the “inside” of the liver. As with a standard liver biopsy, you will need to remain lying down for 4 hours and the nurses will take regular measurements of your pulse and blood pressure.

Your consultant will tell you which of these procedures is best for you.
Will it hurt?

No, the actual procedure should cause no significant pain as we will inject some local anaesthetic to numb the skin and tissues around the liver. However, having the anaesthetic will often sting. Although most people do not need it, we can give you a mild sedative if necessary. **If you have sedation you cannot drive for 24 hours afterwards, therefore you will need someone to collect you.**

What are the complications?

Liver biopsy is a very common test and very few people experience problems. However, there are several complications that can arise after a liver biopsy.

These include:

- Pain at the biopsy site or in your right shoulder. This can be treated with Paracetamol.
- Bleeding internally. There is about a one percent chance (1 in 100) of having some bleeding following a liver biopsy, which often requires no treatment but occasionally may require a blood transfusion or surgery to control.
- There is a risk of dying of between 1 in 1000 (for high risk patients) to 1 in 10,000 as a result of the biopsy.

Your doctor will be happy to discuss these complications with you in more detail.

What happens after I leave hospital?

After going home from hospital you should rest for 24 hours. You should avoid heavy lifting and contact sports for 1 week. If you experience any severe abdominal pain or feel unwell you should contact us or your GP immediately.
When will I get the results of my biopsy?

We will usually receive the results of your biopsy 2 weeks after you have the procedure. Your doctor will make an outpatient appointment to discuss them with you.

Will I need more than one liver biopsy?

In most cases we only need to take one biopsy to establish a diagnosis. However, in some patients we do sometimes do repeat biopsies, as they are a useful way to check if the person’s liver disease is getting better or worse, or if the treatment we are giving is working.

What if I need more information?

Please contact us if you have any further questions, worries or don’t understand something you have been told. You can contact your consultant or one of the nursing staff or leave a message with the department using the contact numbers provided below.

Contact numbers:

Theatre Admissions Unit / Ward Huntsman 3 (Northern General Hospital)

• 0114 226 9308

Clinical Investigations Unit / Ward P1 (Royal Hallamshire Hospital)

• 0114 226 8709