

Information for Patients undergoing Percutaneous Liver Biopsy

This information tells you about the procedure 'Percutaneous Liver Biopsy'. It explains what happens and the possible risks. We hope you find this leaflet helpful but you should still discuss the procedure with your doctor.

Liver biopsy is usually planned well in advance and you should have opportunity to discuss the reason for doing it and any worries you have either with one of your own doctors or the person performing the biopsy.

Do make sure you understand what is involved before you sign the consent form and remember that you can change your mind about having the biopsy at any time.

What is 'Percutaneous Liver Biopsy'?

'Percutaneous' means 'through the skin'

A 'biopsy' is the method of taking a small piece of tissue out of the body through a small puncture site. A special needle is used to do this.

The needle is put in through the skin over the liver on the right side of your upper abdomen.

Why do I need a Liver Biopsy?

Investigations have shown an abnormality in your liver but it is not always possible to determine the cause or degree of these abnormalities on scans alone. The simplest way to make a diagnosis is to examine a sample of liver tissue under the microscope.

Who has made this Decision?

The consultant in charge of your case and the radiologist performing the biopsy will have discussed your case and feel this is the best way of making the diagnosis and planning your treatment. Your opinion will be taken into account and if, after talking to your doctors, you do not wish to have the procedure carried out, then you can decide against it.

Who will be performing the Biopsy?

A specially trained doctor called a radiologist who uses x-ray and scanning equipment to place the biopsy needle accurately into the liver will perform the biopsy.

Where will the Biopsy take place?

Generally the procedure takes place in the x-ray department in one of the scan rooms. The x-ray staff will try to make you as comfortable as possible.

What do I need to do beforehand?

Before your biopsy, your doctor will take blood samples to make sure your blood clots properly. Be sure to mention any medicines you take, especially those that affect blood clotting, like aspirin or blood thinners.

You will probably be asked not eat or drink anything for a few hours before the biopsy. Your doctor will tell you whether to take your regular medications during the fasting period and may give you other special instructions.

What happens during Liver Biopsy?

In the scan room you will be asked to lie on your back on a hospital bed with your right hand above your head. After scanning your liver to determine the best site for the biopsy the radiologist will clean the skin with antiseptic to avoid infection. The skin and deeper tissues will be injected with local anaesthetic; this will sting briefly before the tissues go numb. The radiologist will make a small cut, then insert the biopsy needle to take a sample of liver tissue. Ultrasound or x-rays may be used to guide the needle into the exact position for biopsy.

In some cases when there is an increased risk of bleeding the radiologist may place a small metal coil which looks like a spring into the needle puncture site. This causes blood to clot around it stopping any bleeding.

How long will it take?

The whole procedure takes between 15 and 20 minutes as positioning the biopsy can take a little time. The biopsy itself however takes only a matter of a few seconds.

Will it Hurt?

You will feel stinging as the local anaesthetic is given and then pressure on the skin as the biopsy needle is placed. Some people also feel some momentary discomfort as the needle enters the liver. You may feel discomfort after the biopsy has been taken either in your right shoulder or in the stomach. This is common and you will be offered pain killers to relieve this discomfort, do let the nursing staff know if it does not go away.

What happens afterwards?

After the biopsy has been taken you will be asked to remain lying flat for several hours and the nursing staff will take your pulse and blood pressure regularly.

All being well, you will be allowed home either on the same day, or the next morning. Do not expect to get the result of the biopsy before you leave, as it always takes a few days to do all the necessary tests on the biopsy specimen.

What are the risks and complications?

Percutaneous liver biopsy is in general a very safe procedure but some risks and complications can still arise.

The most usual complication is pain after the procedure as described above which may take several hours to settle.

Bleeding is usually minimal and of short duration but instances of more serious bleeding do occur and this may lead to development of a large 'bruise' either in or around the liver or a leakage of blood into the abdomen or gut. If the bleeding is serious then a further radiological procedure or an operation may be needed.

Finally...

Hopefully some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. **Make sure you are satisfied that you have received enough information about the procedure, before you sign the consent form.**

Percutaneous biopsy is a very safe procedure, designed to save you having a larger operation. There are some slight risks and possible complications involved, but these are generally minor and do not happen very often.

Reference:

Griffiths A, Viiala CH, Olynyk JK.

Liver Biopsy in the 21st Century: Where and Why?

Medical Journal Australia 21 Jan 2002 176 2: 52-53

Clin Gastroenterol 1985 Apr; 14(2):423-49

Percutaneous fine needle biopsy.

Holm HH, Torp-Pedersen S, Larsen T, Juul N.

Radiology 1984 Sep; 152(3):755-7

CT-guided liver biopsies: eight years' experience. Work in progress.

Martino CR, Haaga JR, Bryan PJ, LiPuma JP, El Yousef SJ, Alfidì RJ.

J R Soc Med 1982 Sep; 75(9):736-41

Needle biopsy of the liver: a review.

Losowsky MS.