



## Diagnostic Imaging

# Percutaneous Liver Biopsy

This leaflet tells you about the procedure known as 'Percutaneous Liver Biopsy'. It explains what is involved and what the possible risks are.

### What is a percutaneous liver biopsy'?

'Percutaneous' means 'through the skin'.

A 'biopsy' is the method of taking a small piece of tissue out of the body, using only a tiny incision and a special needle. The needle is put through the skin over the liver on the right side of your upper abdomen. A Pathologist, an expert in examining tissue samples, can then look at it through a microscope.

### Why do I need a liver biopsy?

You may have had an ultrasound scan, MR or a CT scan, which will have shown an abnormality in the liver. It is not always possible to determine the cause of these abnormalities on scans alone. The simplest way to make a diagnosis is to take a tissue sample for a Pathologist to examine.

### Who has made the decision?

The Consultant in charge of your case and a Radiologist will have discussed your case and feel this is the best way of making a diagnosis and planning your treatment. You will also have the opportunity to ask questions, and if, after discussion with your doctors, you do not want the procedure carried out, then you can decide against it.

### Who will be performing the biopsy?

The biopsy will be performed by a doctor called a Radiologist who has been specially trained in using x-ray and scanning equipment to place the biopsy needle accurately into your liver.

### Where will the biopsy take place?

The biopsy will take place in the x-ray department, either in the CT scanning room or a 'special procedures' room, with an ultrasound machine.

### Is there any preparation?

Your referring Consultant should have advised you to **stop** taking **Aspirin, Clopidogrel, Apixaban, Rivaroxaban and Warfarin before** the biopsy, even if you are normally prescribed them. These types of drugs affect blood clotting and you will require a blood test prior to the biopsy.

**Please contact the Radiology Nurses for further advice if you have NOT been instructed to do so.**

Please let your doctor know if you have any allergies. If you have previously reacted to intravenous contrast medium, the dye used for kidney x-rays and CT scanning, you must tell us.

## **Special instructions before the biopsy**

You may have a light meal four hours before the procedure and drink clear fluids up to two hours before the procedure.

Clear fluids = water, clear squash/apple juice, black tea or black coffee, clear herbal teas.

You should continue to take your regular medication as usual; **except** warfarin, clopidogrel, apixaban, rivaroxaban and aspirin. If you have stopped drinking prior to the biopsy, you should take your medication with sips of water.

## **Consent**

Informed consent will be obtained prior to the procedure. Staff will explain all the risks, benefits and alternatives before asking you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to speak with a senior member of staff.

## **What happens during the liver biopsy?**

A nurse will take your details and attach a monitor so she can record your blood pressure and pulse. You will be asked to change into an x-ray gown. The Radiologist will explain the procedure to you before asking you to sign the consent form.

You will be asked to lie on a bed or trolley. After scanning your liver to determine the best site for the biopsy, the Radiologist will clean the skin with antiseptic to avoid infection. The Radiologist will keep everything as sterile as possible; you may have part of your body covered with a sterile towel. The skin and deeper tissues will be anaesthetised with local anaesthetic; this will sting briefly before the tissues go numb. The Radiologist will make a small cut and then insert the biopsy needle. We will continue to scan you to ensure that we have achieved the best position before taking some samples of the liver. A small plaster will be placed over the biopsy site afterwards.

## **How long will it take?**

Every patient is different, and it is not always easy to predict how difficult the procedure will be, but the biopsy will take about 30 minutes.

## **Will it hurt?**

You will feel stinging as the local anaesthetic is given and then pressure on the skin as the biopsy needle is inserted. After the biopsy, it is common to experience some pain at the biopsy site or occasionally in your right shoulder. You will be offered oral painkillers for this. Rarely, the pain requires an injection of painkillers. There will be a nurse, or another member of staff, standing next to you and looking after you.

## **What happens afterwards?**

You will be taken to your ward on a bed or trolley. It is necessary for you to remain lying flat for several hours and the nursing staff will monitor your pulse and blood pressure at regular intervals.

If you are well enough, you will be allowed home later that day or you may need to stay overnight.

## **You must:**

- Have a responsible adult to collect you, as you cannot drive home or travel on public transport
- Have someone staying with you for the first night, just in case your wound bleeds or you feel unwell

- Have access to a telephone
- Refrain from work, exercise or heavy lifting for TWO days following your biopsy.

You will not get the results of your biopsy before you leave as it takes a few days to do all the necessary tests on the biopsy specimen.

## **What are the risks and complications?**

Normally a liver biopsy is a safe procedure, but there are some risks and complications which can still arise, as with any medical treatment.

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

There is usually very slight bleeding, which stops quickly. Bleeding internally occurs rarely (1 in 300 patients). Very rarely, a blood transfusion, an operation or another radiological procedure is required to stop the bleeding.

Occasionally, despite taking every possible care, the piece of tissue obtained is not from the affected area, or it may not be enough for the Pathologist to make a definite diagnosis. In these cases it may be necessary to do another biopsy.

## **Finally**

We hope that you have found this leaflet useful. If you have any questions or are worried about anything, please contact your family doctor (GP) or the Radiology Sister on 01305 255276.

**Make sure you are satisfied that you have received enough information about the procedure before you sign the consent form.**

## **About this leaflet:**

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email [pals@dchft.nhs.uk](mailto:pals@dchft.nhs.uk)



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## Information Booklet: Percutaneous Liver Biopsy

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Please would you kindly take a few minutes to complete the following and write any comments you wish to make below. Thank you; your time is very much appreciated.

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