Department of Hepatology

Liver biopsy

This information leaflet is for patients who are planned to undergo a liver biopsy. The aim of this leaflet is to explain the procedure, the reasons for it being performed, and what the procedure entails.

Important information

Before your appointment
A liver biopsy involves taking a small piece of liver tissue under local anaesthetic. Therefore, if you are on any medication that thins out the blood (including aspirin, clopidogrel, heparin or warfarin) it is important that you highlight this to the ward or the team you saw in clinic before coming in for the biopsy. You should not have a liver biopsy whilst you are on warfarin, heparin or clopidogrel. If you need to be on these medications and a liver biopsy has been requested, you should have been given specific recommendations about what to do with your blood-thinning medication (anticoagulation) before the biopsy.

If you are taking aspirin or any non-steroidal anti-inflammatory drugs (for example ibuprofen, Voltarol or Nurofen), these should be omitted for at least four days before the liver biopsy.

If you have any questions about your medication and having a liver biopsy, please contact D5 (PSSU) between 9:00 and 16:00, Monday to Friday on 01223 217309.

What is a Liver biopsy
A liver biopsy is an investigation which allows the doctor to remove a very small piece of liver tissue for analysis in the laboratory. It is removed by inserting a special needle into the liver under local anaesthetic. This allows the doctor to make the correct decision regarding any further treatment you may require.

What should I expect?
Before the investigation:
You will have a blood test to ensure that your blood clots and that it is therefore safe to do the biopsy.

The biopsy will be performed on the ward or in the ultrasound department. The professional performing the procedure will explain what happens to you and ask you to sign a consent form. This is to ensure that you understand the test and its implications. If you have any questions or worries, please ask.

You can continue to eat your usual meals prior to this procedure.
During the procedure:
You will be made comfortable lying on your back with your right side lying close to the edge of the bed. A nurse will stay with you throughout the procedure if requested. The doctor will give you a small injection of a local anaesthetic to the skin, which may sting a little but this is to numb the skin, the tissues underneath and the edge of the liver, in order to reduce the discomfort of the biopsy. The doctor will then insert the biopsy needle and ask you to breathe out and hold your breath whilst the biopsy is taken. Routinely, two or more samples will be taken, depending on the clinical need. *If you are having an ultrasound guided biopsy, you will be escorted to the ultrasound department.

After the procedure:
Once the biopsy is completed a dressing plaster will be applied. You will be asked to lie on your right side for two hours and to stay in bed for a further four hours after that. This is to minimise the risk of bleeding. Your pulse and blood pressure will be recorded very frequently over the next six hours, starting at ¼ hourly intervals. This is to ensure that any problems are detected promptly.
If you are well at six hours after the biopsy and live near to the hospital you will be able to go home that day. Otherwise you will be discharged first thing the following morning.

When do I know the result?
The liver biopsy will be sent to the Pathology laboratory for examination and the result becomes available usually over the next 10 days.
After your biopsy, a clinic appointment will be made to see you and to discuss the biopsy results. If you do not receive an appointment, please contact the Hepatology secretaries.

Benefits
The benefit of a liver biopsy is that this is the best way of getting information on the cause of liver disease, how much damage there is currently as well as how much scarring (fibrosis) is in the liver. A liver biopsy can often determine whether there is more than one problem affecting the liver.

Risks
You may experience some discomfort in the right shoulder following the procedure, either over the liver (right side of abdomen) or in the right shoulder, which occurs in up to 1 in 3 people and for which regular painkillers will be given. Severe pain is reported much less frequently, one in 30-60 people and will be treated with painkillers and clinical review as appropriate. As the liver has a large blood supply, there is a small risk of bleeding afterwards. Significant bleeding occurs in around one in 200 people. If there is evidence of significant bleeding you may need a blood transfusion and a further scan and other intervention such as angiography may be performed. Needle puncture of an organ other than the liver is extremely rare, occurring in around one in 1000. Once you have had the liver biopsy, regular nursing observations allow us to detect any complications promptly and take necessary action. You may return to work as usual but should avoid strenuous exercise for 48 hours following the biopsy.
Alternatives
The reason for recommendation of a liver biopsy will have been explained to you by the clinical team when seen in clinic. The reasons for needing a liver biopsy vary in different situations. Blood tests give certain information about the stage and nature of liver disease, scans also add to this information. Our department does, where evidence allows, use a scanning machine to attempt to assess scarring of the liver. In a number of situations, however, the information gained from a liver biopsy cannot be obtained through these alternative routes, even in combination.

Contacts/Further information
If you are uncertain why the clinical team looking after you have recommended you have a liver biopsy, please contact the clinicians you saw by ringing the clinical nurse specialists or consultants.

If you have any questions about your stay on the ward when you have a biopsy, please contact D5 (PSSU) on 01223 217309 or the radiology day unit on 01223 274287 as appropriate.

References/Sources of evidence
Guidelines on the use of Liver Biopsy in Clinical Practice (British Society of Gastroenterology, 2004)

Privacy & Dignity
Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site.
For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Help with this leaflet:
If you would like this information in another language, large print or audio format, please ask the department to contact Patient Information: 01223 216032 or patient.information@addenbrookes.nhs.uk

Document history
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