Ultrasound guided liver biopsy

Information for patients
This booklet answers common questions about having an ultrasound guided liver biopsy. In all cases, a doctor will explain the procedure to you and answer any questions that you may have. If you would like further information, or have any particular worries, please do not hesitate to ask your nurse or doctor.

**What is an ultrasound guided liver biopsy?**
It is a medical procedure performed under a local anaesthetic. A needle will be passed through your skin and into the liver guided by ultrasound. Small samples of your liver tissue will be removed and then sent to be examined. A specially trained doctor called an interventional radiologist will perform the procedure.

**Risks and side-effects**
A liver biopsy is generally very safe, but as with any medical procedure there are some risks and possible complications.

The most common side-effect is for patients to feel some aching in the area of the biopsy or around the right shoulder blade when the local anaesthetic wears off. This is due to bruising around the biopsy site and is not serious or dangerous.

Rarely, more serious complications can occur including:
- Injury to internal organs close to the liver
- Bleeding from the biopsy site
- Puncturing the lining of the lung
- Spread of tumour cells to the skin or abdomen if malignant disease is present
- Decompensated liver disease for people with a history of liver cirrhosis

The chance of these complications is less than 1% (less than 1 in 100 people). There is also a very rare chance of death which is less than 1 in 1000. These figures have been taken from national and international research.

The risks are minimised by performing the biopsy in the ultrasound room and ensuring that your blood results are satisfactory beforehand. The potential benefit from the biopsy is greater than the risk because it is most likely to provide the correct diagnosis and ensure that you get suitable treatment if necessary.

**Before your procedure**
You will need to have a blood test about a week before the procedure to check that your blood clotting is normal. If it is abnormal, there is an increased risk of bleeding after the procedure. You may be given special blood transfusions to correct this. Please discuss any concerns that you have with your doctor.

**If you are taking warfarin or any other blood thinning medication,** please call the interventional
radiology department at the Royal Free Hospital on 020 7794 0500 extensions 35492 or 34172 for further advice. Please call at least one week before the procedure as the medication may need to be stopped a number of days before the examination. If you are a neuroendocrine patient, please contact your team regarding the potential need for octreotide cover.

You must avoid eating from midnight before the procedure. You can drink water until 6am. **If you are diabetic, do not take your tablets or insulin on the day of the procedure.** Your blood sugar levels will need to be monitored by the nurse in hospital and you at home to ensure they remain within stable limits. Please take your other medicines as normal, with a sip of water, unless your doctor or nurse tells you otherwise.

You will be admitted to the planned investigation and treatment unit (PITU) on the 2\textsuperscript{nd} floor at 8am on the day of the procedure. The team will provide you with a gown and complete a checklist with you. A hospital porter will then take you to the radiology department at the allocated time.

**What will happen during the procedure?**
The procedure should take approximately 30 minutes and you will need to lie flat on a trolley for this time. An ultrasound scanner will locate the site of the biopsy.
Once the position is confirmed, the radiologist will clean your skin with an antiseptic wash and will give you an injection of local anaesthetic to numb the site. You may feel a slight stinging sensation. A biopsy needle, which is slightly thicker and longer than a blood test needle is inserted into your skin. You will hear a clicking sound from the biopsy needle when a sample has been taken, this process may be repeated two or three times. If you have any pain during the procedure, please inform a member of staff.

**After your procedure**
You will be taken back to the ward where you will need to rest in bed for four to six hours. Initially, you may be asked to lie on your side to put pressure on the biopsy site and reduce the risk of bleeding. You will have your pulse, blood pressure and, if necessary, temperature taken to ensure there have been no complications.

About one in five patients will experience some pain after having a liver biopsy. Simple pain relieving tablets are usually adequate to relieve this.

You can eat and drink normally unless instructed otherwise by your doctor. Assuming you are feeling well, you will be discharged home on the same day. We recommend you do not drive home after the procedure. We also advise against any physical exercise for the
first 24 hours. You can remove the dressing the next day and bath or shower as normal.

What to do if you have a problem at home
If you experience any signs of bleeding or severe pain, you should attend your nearest accident and emergency department and inform staff that you have had a liver biopsy.

When will you receive your results?
The biopsy specimens will be sent for examination. Typically it can take at least two weeks for the biopsy to be processed in the pathology laboratory and for a report to be sent to the doctor who arranged the biopsy.

Parking
Please be aware that a very limited number of parking spaces are available at the hospital. Please visit the Royal Free London website for further information: royalfree.nhs.uk/contact-us/parking-at-our-hospitals

Do you have any further questions? Please use this section to make notes.
More information
For more information about the radiology or liver services at the Royal Free London, please visit our website:

- www.royalfree.nhs.uk/services/services-a-z/radiology
- www.royalfree.nhs.uk/services/services-a-z/liver-services

Your feedback
If you have any feedback on this leaflet or for references for it, please email: rf.communications@nhs.net

Alternative formats
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