Ultrasound-Guided Liver Biopsy

Interventional Radiology

This leaflet provides information about the procedure, what to expect on the day, the potential risks and important information for afterwards.

Prior to the procedure, you may have a pre-assessment or telephone consultation, where you will have the opportunity to ask further questions.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you or with the doctor who will be performing the procedure.

What is an ultrasound-guided liver biopsy?

An ultrasound-guided liver biopsy is a procedure used to obtain a small sample of liver tissue for examination under a microscope. The biopsy helps doctors diagnose and monitor liver conditions, assess the severity of liver disease, assess any lesions and guide further treatment.

The procedure is performed using ultrasound imaging to accurately guide a needle into the liver, ensuring the sample is taken safely and precisely.

Why do I need a liver biopsy?

You may need a liver biopsy to:

- Help diagnose the cause of abnormal liver blood tests
- Assess the degree of liver inflammation or scarring (fibrosis / cirrhosis)
- Monitor known liver disease
- Investigate liver abnormalities seen on scans
- Help guide treatment decisions

Tel: 01932 723470 **Email:** asp-tr.ir-referrals@nhs.net

How do I prepare for a liver biopsy?

You will have a pre-assessment telephone consultation with a nurse before your admission and may be asked to have blood tests before the procedure.

You should stop eating 6 hours prior the procedure, however you can drink 1 cup of clear water per hour until the procedure starts.

As it's a day case procedure, you need to arrange for an adult to collect you from the department and someone to stay with you overnight.

The procedure will take place in the Interventional Radiology (IR), within the Radiology Department at St. Peter's Hospital. When you arrive, you will be given a hospital gown to change into, and a staff will insert an IV cannula.

The doctor will discuss the procedure with you; answer any questions you may have and ask you to sign the consent form if you are happy to proceed.

The procedure will likely be performed under local anaesthetic. Intravenous pain relief and light sedation may also be given, to ensure you are as comfortable as possible.

If you are feeling unwell closer to the day of the procedure, please let the team know.

How is an ultrasound-guided liver biopsy performed?

You will lie on a hospital bed, usually on your back or slightly turned onto your left side. Ultrasound is used to locate a safe area of the liver.

The skin is cleaned and numbed with local anaesthetic. A small incision is made, and a biopsy needle is carefully inserted into the liver under ultrasound guidance. You may be asked to hold your breath briefly while the sample is taken.

One or more small tissue samples may be obtained. The procedure itself usually takes 10–20 minutes.

After the biopsy, pressure is applied to the site, and a dressing is placed over the area.

What are the potential risks and complications of a liver biopsy?

An ultrasound-guided liver biopsy is a common and generally safe procedure. However, as with all medical procedures, there are some risks and potential complications:

Pain or discomfort - Mild to moderate pain at the biopsy site or in the right shoulder (referred pain) occurs in up to 30-40% of patients. This is usually short-lived and can be managed with pain relief.

Bleeding - Minor bleeding is common. Significant bleeding requiring treatment occurs in around 0.5-1% of cases. Very rarely, a blood transfusion or further intervention may be required, as ongoing bleeding can be life threatening 0.01% of cases.

Bruising or haematoma - Bruising around the biopsy site can occur in up to 5-10% of patients and usually resolves without treatment.

Infection - Infection is rare (<1%) but may require antibiotics if it occurs.

Injury to nearby organs - Damage to nearby structures (such as the lung or gallbladder) is very rare (<0.1%), as ultrasound guidance is used to minimise this risk.

Pneumothorax - This is very rare (<0.1%) and is more likely if the biopsy is taken from the upper part of the liver. It may require observation or treatment if it occurs.

What happens afterwards?

After the procedure, you will be transferred to a recovery area and monitored closely.

- Following the biopsy, you will be required to lie in bed for up to 4 hours, often lying on the right side for the first hour.
- Your blood pressure, pulse and comfort will be checked regularly.
- Most patients can go home the same day, but you must arrange for someone to collect you and stay with you overnight.
- Avoid strenuous activity, heavy lifting and driving for 48 hours.
- Mild discomfort is common for a day or two and can be managed with simple pain relief (avoid anti-inflammatory medication unless advised).

You should seek urgent medical advice if you experience:

- Increasing abdominal pain, distension or shoulder pain
- Dizziness or fainting
- Fever or chills
- Shortness of breath
- Bleeding or swelling at the biopsy site

Follow-up arrangements and biopsy results will be discussed with your referring consultant.

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

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You can use Text Relay to turn telephone communications into text. Use the Relay UK app on your phone, tablet or PC. You can also use Relay UK via Minicom or Uniphone.

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اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

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यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

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