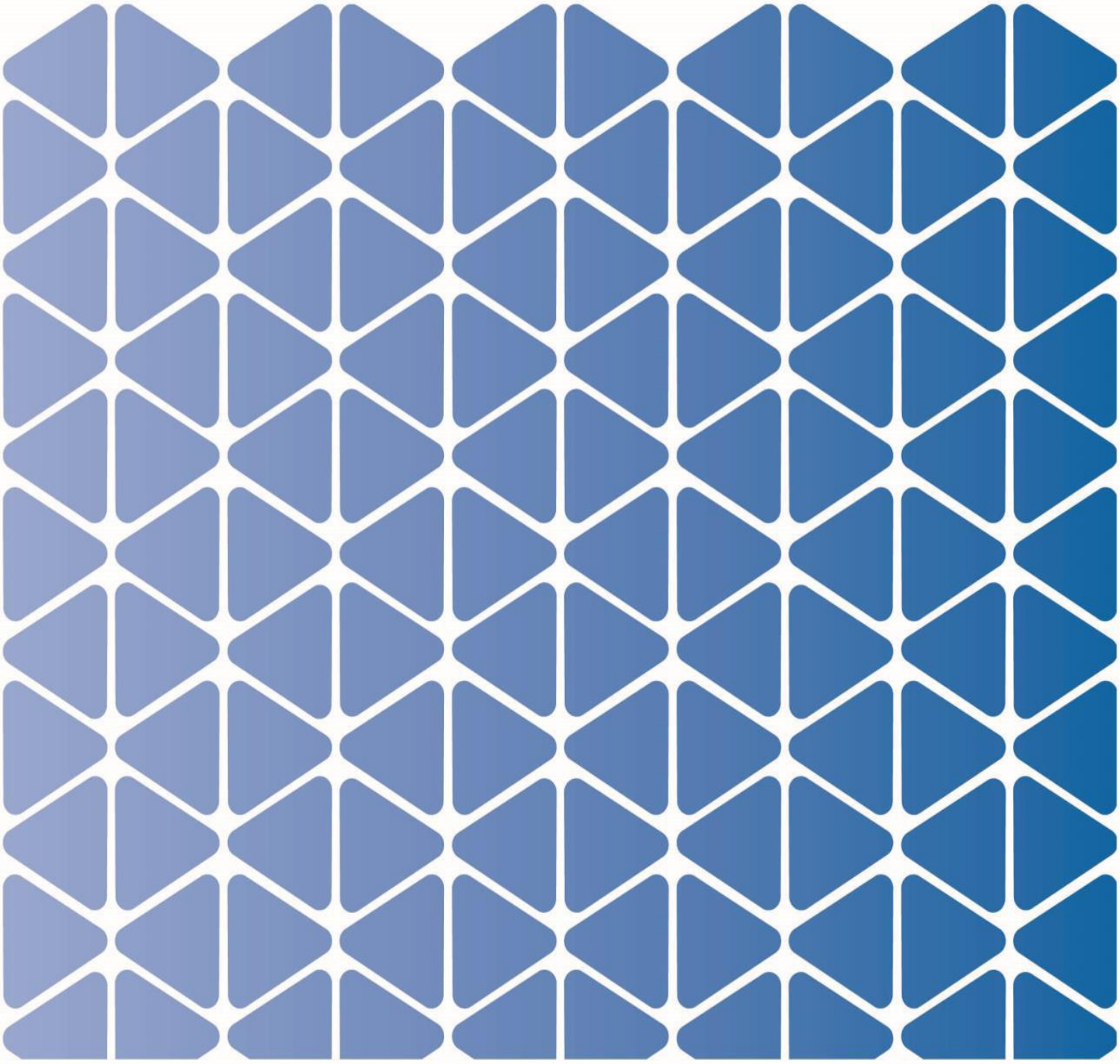
NHS
Worcestershire Acute Hospitals NHS Trust

PATIENT INFORMATION

PERCUTANEOUS LIVER BIOPSY (ULTRASOUND GUIDED)



Radiology / Imaging Department
Investigative procedure information leaflet

Name of procedure: Percutaneous Liver Biopsy (ultrasound guided)

It has been recommended that you have a biopsy, using ultrasound (sound waves) to guide the procedure. A biopsy is when a small sample of tissue is taken from a part of the body. The sample will then be looked at under a microscope or may be tested in other ways. The examination will determine what problems (if any) there are with your liver and allow your doctor/consultant to advise you of the best treatment.

During the procedure you will be asked to lie on your back or left side. The ultrasound probe will then be gently passed over your abdomen to locate the exact position of your liver and area to be biopsied. The skin will then be cleaned with antiseptic solution.

Local anaesthetic will then be injected into a small area of skin and the surrounding tissues. The aim of this is to make the skin numb so that you do not feel any pain. Using the ultrasound images which are shown on a television screen, a needle will be inserted through your skin, into your liver and samples will then be taken. You should not feel any pain, however, you may feel some pressure as the needle is inserted. You may be asked to hold your breath for 5-10 seconds whilst the sample is being taken. As the needle comes out it brings with it a small sample of tissue.

This leaflet explains some of the benefits, risks and alternatives to the procedure. We want you to have an informed choice so you can make the right decision. Please ask your radiological team about anything you do not fully understand or want to be explained in more detail.

We recommend that you read this leaflet carefully. You and your doctor (or other appropriate health professional) will also need to record that you agree to have the procedure by signing a consent form. Your doctor or health professional will give you this form, or you may already have received it through the post with this leaflet. Please sign it if you are satisfied with the explanations and bring it with you when you attend for your biopsy.

Intended benefits of the procedure

The aim of the procedure is to find out if there is an abnormality with your liver and obtain a biopsy for a laboratory diagnosis. You need to be aware that there is a small risk that the result could be inconclusive meaning no diagnosis. Your referring Doctor will be in touch on how to proceed should this be the case.

Serious or frequent risks:
Your doctor has decided to recommend you have this procedure undertaken to help in your continuing treatment, in so doing they have balanced the benefits against any potential risks associated with it. Percutaneous biopsy is considered to be a safe procedure, but occasionally complications can arise because of the test's invasive nature.

These include:

- **Bleeding**
  Internal bleeding from the puncture site can occur. This bleeding will normally stop on its own, but occasionally the bleeding is more severe and a blood transfusion may be required or it could become life threatening and you may need a further procedure or operation. The risk of major bleeding is less than 2% while risk of death is less than 1 in 1000. (*Guidelines on the use of liver biopsy in clinical practice from the British Society of Gastroenterology, the Royal College of Radiologists and the Royal College of Pathology. 2020)*
- **Bile leakage**;
  Internal leakage of bile from the biopsy site can occur. This leakage will normally stop on its own.
- **Infection**
  There is a small risk of infection.
- **Discomfort**
- **Reaction to local anaesthetic**
  There is a small risk of a reaction to the drug used.
- **Accidental injury to other organs**
  The risk of this complication is substantially reduced by the use of the ultrasound guidance.
- **Inadequate sampling**
  We might have to repeat the procedure in recent future if the samples are non-diagnostic or inadequate for all tests.

You will be cared for by a skilled team of doctors, nurses and other healthcare workers who are involved in this type of procedure every day. If problems arise, we will be able to assess them and deal with them appropriately. As with all invasive procedures, there is a very small risk that you may die from complications of the procedure.

Please let the Imaging Department know before attending for the procedure if you:

- are taking any of the drugs mentioned below
- have any allergies

Other procedures that are available
There are no alternative procedures which would obtain a sample from the right part of the liver.

Your anaesthesia
A general anaesthetic is not usually required but as indicated above some local anaesthetic will be injected into your skin to help ensure that you are comfortable during the procedure.

Preparation for your procedure
You can eat and drink normally before the procedure. Your routine medication can be taken with sips of water.
You will need to have a blood test before the biopsy, to check your blood clotting levels. You will be informed of the arrangements for this test.
You can usually continue with your normal medication before your procedure, except those listed below in which case please inform your doctor and the radiology department. Please bring any medication you take with you, particularly if you are to be admitted.

Your normal medication
We will usually ask you to continue with your normal medication (except as instructed below) during your stay in hospital, so please bring it with you.

Aspirin/Dipyrimadole
If you are taking these medicines regularly, please stop 5 days before the biopsy unless you have a high-risk indication. e.g. have had a cardiac stent inserted within the last twelve months.

Clopidogrel, Prasugrel, Persantin, Clexane,
If you are taking any of these regularly, please ring the Booking Coordinator on 01527 503030 asking for extension 44603.
We will need to know why you are taking this medication and discuss this with you.
You will need to stop taking these prior to your procedure, but this should only be done after discussion with the Referring Clinician.

Warfarin, Dabigatran, Rivaroxaban, Edoxaban, Apixaban
If you are taking any of the above, it may need to be stopped prior to the procedure and alternative medication should be arranged with your referring Clinician. Please ring the Booking Coordinator on 01527 503030 asking for extension 44603. We will need to know why you are taking this and what your target INR is.

If you don't feel well and have a cough, a cold or any other illness when you are due to come into hospital for your investigation, we will need to know. Depending on your illness and how urgent your investigation is, your procedure may need to be delayed.

On the day of the procedure

You will be admitted on to a ward. Before being transferred to radiology you will be asked to put on a hospital gown. A small cannula (thin tube) will be placed into a vein in your arm so that the drugs can be given during the procedure, if required.

Prior to the examination the Doctor who will be carrying out your procedure will be available to answer any queries you may have. Please let us know in advance if you are allergic to any antibiotics or other drugs.

During the investigation

Following the procedure, you will be looked after by nursing staff who will carry out routine observations including pulse and blood pressure and will also check the treatment site. You will be discharged by a doctor once you have recovered.

After your investigation

Following the procedure, you will usually be admitted for observation for a period of 4 to 6 hours

Leaving hospital

Length of stay

Most patients having this type of test will be in hospital for 4 – 6 hours post procedure.

Medication when you leave hospital

Before you leave hospital, the pharmacy will give you any extra medication that you need to take when you are at home.

Convalescence

How long it takes for you to fully recover from your biopsy varies from person to person. It can take one to 2 days.

Once home, it is important to rest quietly for the remainder of the day.

Please contact your Consultant or attend the nearest Accident and Emergency Department (not minor injuries), if you:

- Have excessive bleeding from the biopsy site
- experience excessive sweating;
- experience excessive shivering; or
- generally feel unwell
- have increasing pain

Wound

A small waterproof or dressing will be placed over the site after the test and can be replaced if needed.

Personal hygiene
You will normally bathe or shower as normal after you leave hospital.

Diet
You don't usually need to follow a special diet. If you need to change what you eat, we will give you advice before you go home.

Exercise
You should not participate in strenuous sports for the first 10 days after your biopsy. You should avoid heavy lifting and carrying heavy shopping.

Driving
You should not drive until you feel confident that you could perform an emergency stop without discomfort. It is your responsibility to check with your insurance company.

Work
When you return to work will depend on your job. If your job involves heavy manual work you may be advised to take a week off. If your job does not include manual work or lifting you may be able to return to work 2 days after the biopsy.

Test results
We will normally send the samples to a special laboratory in the hospital for tests. The results will not be available on the day of the examination. They will be sent to your referring consultant who will usually either write to you or arrange an outpatient appointment.

Additional Information
The following Internet websites contain additional information that you may find useful:

- www.worcsacute.nhs.uk
  Information about Worcestershire Acute Hospitals NHS Trust
- www.patient.info
  Information fact sheets on health and disease.
- www.nhs.uk
  On-line Health Encyclopaedia and Best Treatments Website.
- www.bsir.org
  British Society of Interventional Radiology – patient information

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.