Having a liver biopsy in the interventional radiology department

This information sheet has been given to you to help answer some of the questions you may have about having a liver biopsy. If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is a liver biopsy?
A liver biopsy is a medical test, where a small sample of tissue is removed from your liver with a needle. The sample is then examined under a microscope.

What are the benefits of having a liver biopsy?
Having a biopsy will help your doctor to make a correct diagnosis so that you can get suitable treatment. Investigations have shown an abnormality in your liver, but it is not always possible to determine the cause or degree of these abnormalities by looking at scans alone. The simplest way to make a diagnosis is to examine a sample of liver tissue under the microscope.

What are the risks of having a liver biopsy?
- There may be bruising or a small swelling around the biopsy area due to bleeding into the skin. This should not be painful and will heal.
- There is a small risk of internal bleeding after the biopsy. If you take aspirin or warfarin, or if you have a bleeding disorder, there may be a greater chance of bleeding from the biopsy site. This is why you will stay in hospital for four to five hours after the procedure, so that we can monitor you.

Are there any alternatives?
A liver biopsy is the only way for your doctor to get the information needed to make a correct diagnosis and treat your illness.

Who will be performing the biopsy?
A specially trained doctor called an interventional radiologist will perform the biopsy. The radiologist will use x-ray and scanning equipment to place the biopsy needle accurately into the liver.
Giving my consent (permission)
The staff caring for you will ask your permission to perform the procedure. You will be asked to sign a consent form that says you have agreed to the procedure and that you understand the benefits, risks and alternatives. If there is anything you don’t understand or if you need more time to think about it, please tell the staff caring for you.

Remember, it is your decision. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind. Your wishes will be respected at all times. If you would like to read our consent policy, please tell a member of staff.

How can I prepare for the procedure?
You can come into hospital, have a liver biopsy and go home the same day. You will need to arrange for someone to take you home by car or taxi.

- You will need to have a blood test about one week before the liver biopsy to check that your blood clotting is normal. This test is necessary as there is increased risk of bleeding after a procedure if your clotting tests are abnormal. Your doctor or clinical nurse specialist will tell you about this test and how to arrange it when they recommend a liver biopsy.
- If you take aspirin, stop taking this about five days before the biopsy. Speak to your doctor about this.
- If you are taking warfarin, or any other blood thinning medicine, please call the interventional radiology department at Guy’s on 020 7188 5573 or St Thomas’ on 020 7188 5477 for further advice.
- Let your doctor know about any medicines you are taking. Take your other medicines as normal, unless your doctor or nurse tells you not to.
- Do not eat or drink anything (except water) for six hours before the procedure. You can drink water up to two hours before the procedure.

If you are having the biopsy while you are staying in hospital, your nurse will help you to prepare.

What happens before the liver biopsy?
Please arrive 30 minutes before your appointment time. After you have arrived at the interventional radiology department, you will be checked by a radiology nurse and given a hospital gown to wear. A small plastic tube (cannula) will be put into your arm. This means that we can give you a sedative during the procedure, if you need it.

You will be given the opportunity to ask the interventional radiologist any questions you have. You will need to sign a consent form before the biopsy can take place.
What happens during the liver biopsy?

There are two types of biopsy – a percutaneous biopsy and a trans-jugular biopsy.

Percutaneous biopsy
Percutaneous means ‘through the skin’. This type of biopsy is done under ultrasound guidance. Your skin will be cleaned with an antiseptic solution and draped with sterile towels. Local anaesthetic is then injected around the area from where the biopsy will be taken. This numbs the area, so you do not feel any pain.

The radiologist then uses a special needle to remove a small piece of liver tissue. The needle is put in through the skin over the liver on the right side of your upper abdomen. The sample is then sent to the laboratory for microscopic examination. The wound site is cleaned and a dressing put over it.

Trans-jugular biopsy
This type of biopsy is done under ultrasound and x-ray guidance. In certain circumstances, your doctor may decide to perform the biopsy using this method, rather than percutaneously – you will be advised of the reasons for this if this is the case.

The right side of your neck will be cleaned with an antiseptic solution and draped with sterile towels. Local anaesthetic is injected and when your skin is numb, a small catheter (tube) is introduced through a vein in your neck. The catheter is manoeuvred into the liver under x-ray guidance. When the radiologist is satisfied with the position, a small piece of tissue is taken from the liver. This is then sent for microscopic examination. The wound site is cleaned and a dressing put over it.

Will I feel any pain?

The examination should be pain free, though occasionally when a biopsy is being taken it may hurt. The position in which you will be asked to lie during the biopsy may be uncomfortable for a short period. If you experience any pain during the procedure, please tell the nurse and pain relief can be given to you.

What happens after the liver biopsy?

After the biopsy you will stay in the recovery unit. You will need to stay in bed for four to five hours, or as instructed by the nurse. You will be asked to lie on your side or on your back for two to three of these hours to help the healing process. Your blood pressure, pulse and temperature will be checked at regular intervals to spot any problems.

We will provide light refreshment, such as tea or coffee, a sandwich and some fruit. If you have any special dietary requirements, you may wish to bring some food and drink with you. The nurse will tell you when you can get up and move around.

If you had the biopsy as a day case patient, you will be able to go home. You will need a responsible adult to take you home by car or taxi. We do not recommend that you use public transport as it is unsafe if you feel unwell.

If you are staying in the hospital and there are no problems, you will be taken back to your ward after about half an hour.
When will I receive the results?

The results will take about seven to ten working days. You will need to make an appointment with the doctor that referred you in order to pick up your results. If your referring doctor is based at Guy’s and St Thomas’, you can make an appointment before you leave the hospital.

If I am a day patient, what do I need to do after I go home?

You should rest for the remainder of the day and possibly for the next day, depending on your recovery.

- Have someone to stay with you overnight.
- Eat and drink normally.
- Take your usual pain relief, as prescribed, if you have any pain.
- Continue with your normal medication as prescribed.
- Keep a regular check on the biopsy site.
- Shower no sooner than 24 hours after the procedure, and bath no sooner than 48 hours after the procedure.

Please rest at home for a minimum of 24 hours. Do not go to work or school on the day after the procedure. Always follow the advice and instructions that the doctors and nurses have given you.

What if I have a problem at home?

Please contact the interventional radiology department on 020 7188 5573 at Guy’s or 020 7188 5477 at St Thomas’, Monday to Friday, 9am to 5pm, if you need advice.

You may notice some bruising at the puncture site. Bleeding or swelling is rare, but if it does happen, lie down and apply pressure directly on the site for ten minutes. If the bleeding or swelling continues after ten minutes go to your nearest accident and emergency (A&E) department.

If you feel you need urgent medical attention or are worried about anything outside of our normal opening hours, please contact your GP, NHS Direct/111 or go to your nearest accident and emergency (A&E) department.
Further information

Contact us
If you have any questions or concerns, please contact the interventional radiology department on 020 7188 5573 at Guy’s or 020 7188 5477 at St Thomas’, Monday to Friday, 9am to 5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

Knowledge & Information Centre (KIC)
For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas’ Hospital.

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch:

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

www.nhs.uk