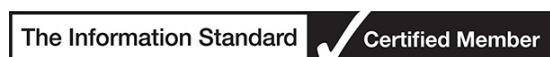


R05 Liver Biopsy

Expires end of February 2022

Review Only



eidohealthcare.com

EIDO
HEALTHCARE

UNITED KINGDOM

Information about COVID-19 (Coronavirus)

On 11 March 2020 the World Health Organization confirmed COVID-19 (coronavirus) has now spread all over the world (this means it is a 'pandemic'). Hospitals have very robust infection control procedures, however, it is impossible to make sure you don't catch coronavirus either before you come into the hospital or once you are there. You will need to think carefully about the risks associated with the procedure, the risk of catching coronavirus while you are in hospital, and of not going ahead with the procedure at all. Your healthcare team can help you understand the balance of these risks. If you catch the coronavirus, this could affect your recovery and might increase your risk of pneumonia and even death. Talk to your healthcare team about the balance of risk between waiting until the pandemic is over (this could be many months) and going ahead with your procedure.

Please visit the World Health Organization website: <https://www.who.int/> for up-to-date information.

Elective procedure

Following the Covid-19 (coronavirus) pandemic, some procedures have been delayed. As soon as the hospital confirms that it is safe, you will be offered a date for your procedure. Your healthcare team can tell you about the risks of coronavirus.

It is up to you to decide whether to have the procedure or not. You will be given information about the benefits of the procedure, the alternatives, and any complications that may happen. You also need to consider the risk of getting coronavirus while you are in hospital. If you would rather delay the procedure until you feel happy to go ahead with it, or if you want to cancel the procedure, you should tell the healthcare team.

If you decide to go ahead, you will need to self-isolate for the 14 days leading up to the procedure (your healthcare team will confirm this with you). If you are not able to self-isolate, tell your healthcare team as soon as possible. You may need a coronavirus test 48 hours before the procedure. This involves the healthcare team taking a nasal and throat swab (using cotton wool to take a sample from the surface of your nasal passage and throat). If your test is positive (meaning you have coronavirus), the procedure will be postponed until you have recovered.

Coronavirus is highly contagious (meaning it spreads easily from person to person). The most common way that people catch it is by touching their face after they have touched a person or surface that has the virus on it. Try not to touch your face, especially if you have not washed your hands.

Wash your hands for at least 20 seconds when you enter the hospital, at regular intervals after that, and when you move from one part of the hospital to another.

Be aware of social distancing. Chairs and beds are spaced apart. If your healthcare team need to be close to you, they will wear personal protective equipment (PPE). If you can't hear what they are saying because of their PPE, ask them to repeat it until you can.

You may not be allowed visitors, or your visiting may be restricted.

Your surgery is important and the hospital and health professionals looking after you are very well equipped to perform it in a safe and clean environment. Guidance about coronavirus may change quickly — your healthcare team will have the most up-to-date information.

What is a liver biopsy?

A liver biopsy involves removing small pieces of tissue from your liver using a needle.

Your doctor has recommended a liver biopsy. However, it is your decision to go ahead with the procedure or not.

This document will give you information about the benefits and risks to help you to make an informed decision. If you have any questions that this document does not answer, ask your doctor or the healthcare team.

What are the benefits of a liver biopsy?

Your liver carries out many important functions, including producing bile to help you to digest food and cleaning your blood of drugs and chemicals (see figure 1). Your doctor is concerned that there may be a problem with your liver. You will already have had a blood test and a scan. Your doctor will tell you which of the following problems is most likely in your case.

- Inflammation (hepatitis) – This is usually caused by an infection.
- Cirrhosis – A condition where normal liver tissue gets damaged and is replaced by scar tissue.
- A tumour – A liver tumour may be benign (a growth that does not spread to other areas of your body) or a cancer.

The tissue that your doctor removes will be examined under a microscope to help make the diagnosis or help your doctor to recommend the best treatment for you. If a problem is found, the healthcare team will discuss the appropriate treatment with you.

If the biopsy is normal, the healthcare team will reassure you.

Are there any alternatives to a liver biopsy?

A blood test or ultrasound scan may show that you have a problem. Specialised scans can tell your doctor how serious it is. However, a biopsy will help to find out exactly what is causing the problem and will help your doctor to recommend the best treatment for you.

What will happen if I decide not to have a liver biopsy?

Your doctor may not be able to confirm what the problem is or recommend the best treatment for you. If you decide not to have a liver biopsy, you should discuss this carefully with your doctor.

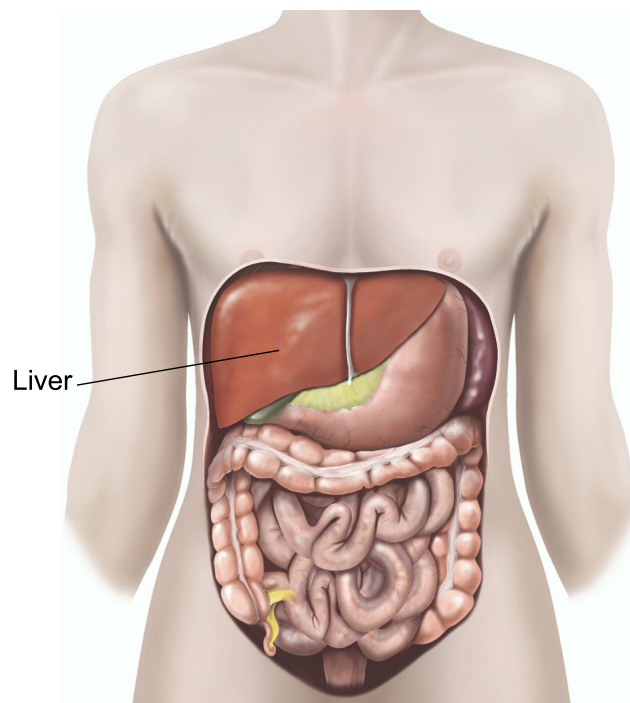


Figure 1
The position of the liver

What does the procedure involve?

Before the procedure

If you are female, the healthcare team may ask you to have a pregnancy test because x-rays are harmful to unborn babies. Sometimes the test does not show an early-stage pregnancy so let the healthcare team know if you could be pregnant.

The healthcare team will carry out a number of checks to make sure you have the procedure you came in for. You can help by confirming to your doctor and the healthcare team your name and the procedure you are having.

The healthcare team will ask you to sign the consent form once you have read this document and they have answered your questions.

Do not eat in the 2 hours before the procedure. The healthcare team will take a blood sample from you to check that your blood clots normally.

Your doctor may give you antibiotics or other medication. They will discuss this with you.

In the treatment room

A liver biopsy usually takes less than 30 minutes.

Your doctor may offer you a sedative or painkiller which they can give you through a small needle in your arm or the back of your hand. If you have the sedative you will be able to ask and answer questions but you will feel relaxed.

The healthcare team will monitor your oxygen levels and heart rate using a finger or toe clip. If you need oxygen, they will give it to you through a mask or small tube under your nostrils. They will also monitor your blood pressure using a device that is strapped to your arm.

Your doctor will inject local anaesthetic into the area where the needle will be inserted. This stings for a moment but will make the area numb, allowing your doctor to perform the procedure with much less discomfort for you.

The two commonly-used techniques are ultrasound-guided liver biopsy and transjugular liver biopsy.

Ultrasound-guided liver biopsy

Your doctor will ask you to lie on your back, with your right elbow out to the side and your right hand under your head. It is important that you keep as still as possible during the procedure.

Your doctor will make a small cut on the skin on your right side, usually between your lower ribs. They will insert the needle through the cut and into your liver to remove a small piece of tissue. They will often use an ultrasound scan to guide them while they perform the biopsy.

Your doctor will remove the needle and cover the cut with a small plaster.

Transjugular liver biopsy

Your doctor will ask you to lie on your back. It is important that you keep as still as possible during the procedure.

Your doctor will make a small cut on your skin on the right side of your neck and then insert a catheter (tube) into your jugular vein. They will use x-rays to help them guide the tube through your veins.

When the tube reaches your liver, your doctor will pass a needle down the tube and into your liver. They will pass a special liquid through the catheter to check that the needle is in the right position. Your doctor will ask you to hold your breath while they remove a small piece of tissue.

Your doctor will remove the needle and catheter and press gently on the side of your neck to close the cut.

What should I do about my medication?

Let your doctor know about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

What complications can happen?

The healthcare team will try to reduce the risk of complications.

Any numbers which relate to risk are from studies of people who have had this procedure. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

Some complications can be serious and can even cause death (risk: less than 1 in 1,000).

You should ask your doctor if there is anything you do not understand.

The possible complications of a liver biopsy are listed below.

- **Pain.** The local anaesthetic and painkillers should help to keep you comfortable. If you have any pain during the procedure, let your doctor know. It is common to have some discomfort or a dull pain in your shoulders and back, which can usually be controlled with simple painkillers such as paracetamol.
- **Bleeding,** which usually stops on its own. Sometimes bleeding can be heavy and you may need a blood transfusion or further treatment (risk: less than 1 in 140 for a blood transfusion).
- **Inflammation of the lining of your abdomen (peritonitis),** if bile leaks from the biopsy site (risk: less than 1 in 1,000). You may need surgery to stop the leak.

- Making a hole in nearby structures with the needle. This does not usually cause any serious problems but you may need further treatment.
- Allergic reaction to the equipment, materials or medication. The healthcare team is trained to detect and treat any reactions that might happen. Let your doctor know if you have any allergies or if you have reacted to any medication or tests in the past.
- Infection. You may need treatment with antibiotics. Let your doctor know if you get a high temperature or feel unwell.

How soon will I recover?

After the procedure you will be transferred to the recovery area where you can rest. You will be allowed to eat and drink after about 30 minutes.

You may need to lie on your right side for 2 hours and then flat on your back. This reduces the risk of bleeding from the biopsy site by placing pressure on your liver.

The healthcare team will check you regularly for any signs of bleeding, usually for 6 hours.

You should be able to go home the same day. However, your doctor may recommend that you stay a little longer. If you were given a sedative and go home the same day, a responsible adult should take you home in a car or taxi and stay with you for at least 24 hours. Be near a telephone in case of an emergency.

If possible, make sure you are within an hour's drive of the hospital in case any complications happen.

Do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination. You should also not sign legal documents or drink alcohol for at least 24 hours.

If you develop a fever, have difficulty breathing, chills, dizziness, tenderness or severe pain at the site of the biopsy or in your chest, shoulder or stomach, contact the hospital.

If you take blood-thinning medication, your doctor will tell you when you can start taking it again. Do not take aspirin for the first week.

You should be able to return to work the next day unless you are told otherwise. Do not do strenuous exercise for 1 to 2 days.

Results from the biopsy will not be available for at least a few days so the healthcare team may arrange for you to come back to the clinic for these results. The healthcare team will discuss with you any treatment or follow-up you need.

Lifestyle changes

If you smoke, stopping smoking will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight.

Regular exercise should improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

Summary

A liver biopsy is usually a safe and effective way of finding out if there is a problem with your liver. However, complications can happen. You need to know about them to help you to make an informed decision about the procedure. Knowing about them will also help to detect and treat any problems early.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

Acknowledgements

Reviewers: Dr Simon Whitaker MRCP FRCR, Mrs Samantha Gamble RGN
Illustrator: Medical Illustration Copyright © Medical-Artist.com

This document is intended for information purposes only and should not replace advice that your relevant healthcare team would give you.