
Liver Biopsy

1. What is a liver biopsy?

A liver biopsy is where a small piece of liver tissue is removed so that it can be checked by Pathology. Looking at the liver tissue itself is the best way to see how much damage there is and what is causing it to be damaged.

The doctor will give you an injection of local anaesthetic into the skin over the liver.

You will be asked to take a few deep breaths and then hold your breath. While you are holding your breath, the biopsy needle is put into the liver and a small piece of tissue is taken.

The procedure may be repeated a couple of times to obtain the necessary samples. It usually only takes about 5 minutes to complete the entire procedure.

This procedure may or may not require a sedation anaesthetic.

2. Will there be any discomfort? Is any anaesthetic needed?

Sedation is usually not necessary. The procedure can be uncomfortable and to make the procedure more comfortable a local anaesthetic is injected.

3. What is sedation?

Sedation is the use of drugs that give you a 'sleepy-like' feeling. It makes you feel very relaxed during a procedure that may be otherwise unpleasant or painful.

This procedure only has a light sedation. You need to be able to fully co-operate at times by holding your breath when instructed by the doctor.

Anaesthesia is generally very safe but even light sedation has a risk of side effects and complications. Whilst these as a rule are temporary, some of them may cause long-term problems.

The risk to you will depend on:

- personal factors, such as whether you smoke or are overweight.
- whether you have any other illness such as asthma, diabetes, heart disease, kidney disease, high blood pressure or other serious medical conditions.

4. What are the risks of this specific procedure?

There are risks and complications with this procedure. They include but are not limited to the following.

Common risks and complications include:

- Pain at either the biopsy site or in the right shoulder which may last for a couple of days after the procedure. This may require pain relief medication.
- Nausea and vomiting.
- Faintness or dizziness, especially when you start to move around.
- Headache.
- Pain, redness or bruising at the sedation injection site (usually in the hand or arm).

- Muscle aches and pains.
- Allergy to medications given at time of the procedure.
- Failure of local anaesthetic. This may require a further injection of anaesthetic.

Uncommon risks and complications include:

- Internal bleeding. This may settle without treatment but could require a blood transfusion and/or surgery. 1 person in every 500 will have severe bleeding requiring a hospital admission.
- About 1 person in every 200 will have an injury or an organ punctured that is near your liver such as the right lung, gallbladder or bowel. This may need further treatment or surgery.
- Heart problems. You will need to stop any blood thinning medication (Asprin, Clopidogrel (Plavix and Iscover) or Dipyridamole (Persantin and Asasantin)) you may usually take. This results in a risk of clots, heart attack or stroke in the time you are off these medications.
- An existing medical condition that you may have getting worse.
- Clots in the leg (deep vein thrombosis or DVT) with pain and swelling. Rarely part of this clot may break off and go into the lungs.
- The biopsy may not get enough tissue to be useful.

Rare risks and complications include:

- Infection. This will need antibiotics.
- 'Dead arm' type feeling in any nerve, due to positioning with the procedure – usually temporary.
- Anaphylaxis (severe allergy) to medication given at the time of procedure.
- Death as a result of complications to this procedure is rare.

5. What are your responsibilities before having this procedure?

You are less at risk of problems if you do the following:

- Bring all your prescribed drugs, those drugs you buy over the counter, herbal remedies and supplements and show your doctor what you are taking. Tell your doctor about any allergies or side effects you may have.
- Do not drink any alcohol and stop recreational drugs 24 hours before the procedure. If you have a drug habit please tell your doctor.
- If you take Warfarin, Persantin, Clopidogrel (Plavix or Iscover), Asasantin or any other drug that is used to thin your blood ask your doctor if you should stop taking it before the procedure as it may affect your blood clotting. Do not stop taking them without asking your doctor.

6. Preparation for the procedure

You should not eat or drink anything for at least 6 hours before the procedure to make sure you have an empty stomach, which is necessary for a safe examination.

Your doctor may do a blood test before you book in, to ensure you have no bleeding or blood clotting problems. An ultrasound or CT scan of your liver may be done to help doctors locate a particular area of tissue where the sample will be taken.

7. What if I don't have the procedure?

Your symptoms may become worse and the doctor will not be able to give you the correct treatment without knowing the cause of your problems.

8. Are there other tests I can have instead?

There is no direct alternative to a biopsy. It is possible for your doctor to try to guess what is happening in your liver by doing blood tests and radiological imaging. This does not give the same information as the biopsy.

9. What can I expect after this procedure?

You will remain in the recovery area for 2 - 4 hours until the effect of the sedation wears off. You will need to lie on your right side, pressed against a towel, for 2 - 4 hours.

Your doctor will tell you when you can eat and drink. Most times this is straight after the procedure.

You will be observed for complications until most of the effects of the medications have worn off.

On discharge, you must go directly home and stay in bed for 8 to 12 hours, depending on your doctor's instruction. Do not exert yourself for the next week so your liver can heal.

10. What are the safety issues?

Sedation will affect your judgment for about 24 hours. For your own safety and in some cases legally;

- Do **NOT** drive any type of car, bike or other vehicle. You must be taken home by a responsible adult person.
- Do **NOT** operate machinery including cooking implements.
- Do **NOT** make important decisions or sign a legal document.
- Do **NOT** drink alcohol, take other mind-altering substances, or smoke. They may react with the sedation drugs.
- Have an adult with you on the first night after your surgery.

Notify the hospital Emergency Department straight away if you have:

- shoulder tip pain or severe ongoing abdominal pain.
- severe faintness.
- shortness of breath.
- a fever.
- sharp chest pain.
- have redness, tenderness or swelling for more than 48hours where you had the injection for sedation (either in the hand or arm).