Biopsy

A biopsy allows doctors to take cells from your body and to look at them under a microscope. The procedure is usually used to confirm whether you have lymphoma. A biopsy can also give further information about your lymphoma, for example its type and whether it is growing.

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What is a biopsy?

A biopsy is a minor operation. It takes a sample of tissue (made up of cells) from your body for examination in a laboratory. The tissue sample itself is sometimes also known as a ‘biopsy’ or a ‘biopsy sample’.

A specialist doctor called a ‘pathologist’ looks at the sample under a microscope to check for lymphoma cells. If you already have a lymphoma diagnosis, they look at the cells to find out more about the type of lymphoma. They can also advise on whether you need further specialised diagnostic tests.

When might I need a biopsy?

Usually, a biopsy is the only way to confirm a diagnosis of lymphoma.

To diagnose lymphoma, a biopsy sample is often taken from a lymph node (gland). Very occasionally, a sample might also be removed from an organ, such as the liver. Lymph nodes are part of your immune system. They help fight infections and drain waste fluids.
In addition to making a diagnosis of lymphoma, a biopsy might also be used to check:

- which **type of lymphoma** you have
- how fast your lymphoma is growing, which helps your medical team plan your **treatment**
- how well your lymphoma has responded to treatment and, sometimes, to check if the lymphoma has come back (**relapsed**).

### Types of biopsy

There are different types of biopsy, including:

- an **excision biopsy**, which removes a whole lymph node
- an **incisional biopsy**, which removes part of a lymph node
- a **core needle biopsy**, which takes a small sample of a lymph node; this type of biopsy is also known as a ‘core biopsy’ or a ‘needle biopsy’
- a **laparoscopic (keyhole) biopsy**, which removes all or part of a lymph node.

### Excision biopsy

An excision biopsy is the most common type of biopsy used to diagnose lymphoma. With an excision biopsy, your surgeon removes a whole lymph node. This gives doctors a large enough sample to tell whether or not you have lymphoma. There is also enough tissue for any additional tests you might need.

An excision biopsy is a minor operation. If the **lymph node** is near the surface of your skin, you usually have a local anaesthetic. If it is deeper inside your body, you might have a general anaesthetic. You go to hospital as an outpatient and the visit takes a few hours.

You might have a **CT, PET, ultrasound, X-ray** or **MRI scan** before an excision biopsy. The images from the scan help guide your surgeon to the exact place to take the biopsy sample from. They then clean and numb the area, remove a lymph node and send it to a laboratory for a pathologist to examine it.

After an excision biopsy, your wound is stitched and dressed. You should be given information about how to care for the biopsied area to reduce the risk of infection. If you are not offered this advice, ask for it.
You are allowed to go home as soon as you can pass urine and walk. If you had a general anaesthetic, it won’t be safe for you to drive yourself home. You might be able to drive if you had local anaesthetic; however, the general advice is to have someone collect you from the hospital.

Around a week later, your stitches are removed, either at your GP surgery or at the hospital. Your medical team can give you more information about arranging this appointment.

**Incisional biopsy**

An incisional biopsy is often used when lymph nodes are large from being swollen or matted. The procedure is similar to that of an excision biopsy, although only part (instead of all) of a lymph node is removed.

**Core needle biopsy**

With a core needle biopsy, a small sample of a lymph node is taken.

You might have a core needle biopsy if:

- it is very difficult to remove the whole lymph node and
- the procedure can be performed under imaging control (guided by an ultrasound scan or CT scan).

You might still need an excision biopsy at a later date. This is particularly likely if the core needle biopsy sample does not provide enough sample material to rule out the possibility of a lymphoma diagnosis.

A core needle biopsy is a minor procedure, generally carried out under local anaesthetic. Usually, it takes around 15 to 30 minutes. A surgeon or radiologist clean and numb the area before using a hollow needle to remove some of the tissue from a lymph node. They then send it to a laboratory for a pathologist to examine it.

If the lymph node to be biopsied is near to the surface of your skin, the surgeon can feel for it. If it is deeper within your body, they might ask you to have an ultrasound or CT scan. The scan images help guide your surgeon to the exact place to take the biopsy sample from.

After a core biopsy, your wound is dressed with a dressing pack. You should be given information about how to care for the biopsied area to reduce the risk of infection. If you are not offered this advice, ask for it.
If you have a biopsy that is guided by ultrasound, you can usually go home straight after the procedure.

If you have a biopsy that is guided by CT, you are likely to be kept in hospital for a few hours. This is to check your recovery before.

It is generally safe for you to drive yourself home after having a biopsy.

**Laparoscopic (keyhole) biopsy**

You might have a laparoscopic biopsy if the lymph nodes affected are deep within your body, for example, in your tummy (abdomen).

A laparoscopic (keyhole) biopsy is carried out under general anaesthetic. A surgeon cleans the area before making a small cut (incision) through your skin. They pass a very narrow instrument through the incision and remove all or part of the lymph node to send to a laboratory for a pathologist to examine it.

After a laparoscopic biopsy, your wound is dressed. You should be given information about how to care for the biopsied area. If you are not offered this advice, ask for it.

You might need to stay in hospital overnight. Generally, you can go home the next day. It might be safe for you to drive, although the general advice is to have someone collect you from the hospital.

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**Caring for the biopsied area**

After your biopsy, a medical professional checks that it is safe for you to go home. They cover the biopsied area with a protective dressing. Most dressings are waterproof, although they might not withstand a high pressure ‘power’ shower. In general, the guidance is to leave the dressing on for a few days.

Before you leave the hospital, your **medical team** should give you clear advice on how to care for the biopsied area. Usually, this includes avoiding swimming pools, saunas and hot tubs until the wound heals (normally after around 7 to 10 days after the procedure). This is to avoid infection and to stop the dressing from coming off.

If you have any problems with the wound after a few days, contact the surgical team at your hospital.
Seek medical advice straightaway if you notice any signs of infection, including bleeding, swelling, discharge from the biopsied area, fever (a temperature above 38°C), chills and sweating.

Getting your biopsy results

Ask your doctor how long it will be before you get the results of your biopsy. Sometimes results come through within a few days. Other times, they take around a week. Your biopsy sample might need to be sent for further laboratory tests, which could mean a slightly longer wait.

It can be hard waiting for results and for information about your treatment plan. Your medical team will talk to you about your individual treatment as soon as they’re sure that they have a confirmed diagnosis.

While you are waiting for your results, it might be possible to get ahead with staging tests and other assessments – your medical team will organise any that are appropriate for you. Your team can also give you some general information about possible treatment types once a diagnosis of lymphoma is confirmed.

It is natural to feel anxious while you are waiting for your results. Contact your GP if you are concerned about the length of time you have been waiting. If you’d like to talk to someone about how you’re feeling, or about any aspect of lymphoma, please call our Helpline freephone on 0808 808 5555. You can also use our online Community Forum to get in touch with others who are affected by lymphoma.

Will I need further tests?

If your doctors think that other areas of your body could be affected by lymphoma, they might ask you to have another biopsy to check.

You might also have further tests and scans to give doctors information about the exact type and stage of your lymphoma. These investigations help your medical team decide how best to treat you and when to begin treatment.

Other investigations you might have include fine needle aspiration cytology (FNAC or FNA) and endobronchial ultrasound-guided fine needle aspiration (EBUS-FNA).
**Fine needle aspiration cytology**

Fine needle aspiration cytology (FNA or FNAC) is occasionally done if doctors suspect that you could have lymphoma. With FNA, your surgeon collects a small amount of tissue from a lymph node using a very thin needle.

The needle is put into a lymph node for 30 to 40 seconds. Your surgeon takes a small amount of tissue and sends it to a laboratory for a pathologist to examine it.

For lymph nodes just under the skin, the procedure is done without an anaesthetic. For deeper lymph nodes, or where ultrasound or CT image guidance is used, it is done under a local anaesthetic.

Although FNA can help doctors find out whether you might have lymphoma, it is not enough on its own. Further tests (such as an excision or incisional biopsy) are needed to confirm the diagnosis.

In general, you can go home straightaway after an FNA.

**Endobronchial ultrasound-guided fine needle aspiration**

Endobronchial ultrasound-guided fine needle aspiration (EBUS-FNA) is sometimes used if the affected lymph nodes are deep within your chest, making them difficult to biopsy.

A flexible tube is passed down your windpipe. The tube contains a needle and an instrument called an 'ultrasound probe'. **Ultrasound** guides the needle to the lymph nodes within your chest. Your surgeon uses the needle to collect tissue before sending it to a laboratory for a pathologist to examine it.

EBUS-FNA is done under local anaesthetic, with sedation and pain relief that is given into a vein (intravenously). The procedure takes about 30 minutes. You are then usually kept in hospital for 2 to 3 hours to check your recovery. It’s generally advised that you do not drive after sedation and that you should arrange for someone to collect you and take you home.

**FAQs about biopsy**

We address some of the common questions and concerns people have about biopsies. Your medical team can give advice specific to your situation.
Is a biopsy painful?

Biopsies are done under anaesthetic so that you do not feel pain during the procedure. Once the anaesthetic wears off, you might feel some discomfort, such as soreness or aching in the biopsied area. Usually, doctors advise that you take paracetamol or ibuprofen to relieve any pain. They might also give you other pain relief medication on prescription. Any pain should go away completely after a few days. If you continue to feel pain, contact the biopsy team at your hospital for a medical review.

Can removing a lymph node affect my immunity?

Lymph nodes are an important part of your immune system. However, the human body has a network of several hundred lymph nodes and removing a small number does not affect your immunity.

Can removing an affected lymph node remove the lymphoma?

A lymph node biopsy cannot remove the lymphoma completely, even if it is mostly in one area. Even for lymphomas that appear to be in only one area, surgery usually leaves some lymphoma cells behind. For this reason, treatments such as chemotherapy and radiotherapy are much more effective.

We have separate information about the topics in bold font. Please get in touch if you’d like to request copies or if you would like further information about any aspect of lymphoma. Phone 0808 808 5555 or email information@lymphoma-action.org.uk.

References

The full list of references for this page is available on our website. Alternatively, email publications@lymphoma-action.org.uk or call 01296 619409 if you would like a copy.

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Tell us what you think and help us to improve our resources for people affected by lymphoma. If you have any feedback, please visit lymphoma-action.org.uk/Feedback or email publications@lymphoma-action.org.uk.

All our information is available without charge. If you have found it useful and would like to make a donation to support our work you can do so on our website lymphoma-action.org.uk/Donate. Our information could not be produced without support from people like you. Thank you.

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