

**Patient
Information**

CT (Computed Tomography) guided lung/pleural biopsy

If you do not believe you should have been referred for this procedure please contact the CT department immediately.

Introduction

This leaflet gives you information about having a Computed Tomography (CT) guided lung/pleural biopsy. It explains how the procedure is carried out and some of the possible complications.

Why do I need a biopsy?

Previous imaging you have had has shown an abnormal area in your chest. It is not possible to say exactly what the abnormality is and the best way to find out is to take a small piece of tissue (biopsy) and examine it under a microscope.

Where will the biopsy be done and who will carry it out?

The biopsy will be done in a CT scanner in the Radiology Department.



Figure 1: CT scanner

Reference No.

GHP11154_04_19

Department

Radiology

Review due

April 2022

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A radiologist (a doctor who specialises in reading diagnostic images such as X-rays and CT scans) will carry out the biopsy. They will be assisted by a radiology nurse and a radiographer who will take the images.

How do I prepare for the biopsy?

Before your biopsy a pre-assessment appointment will be made for you to discuss the procedure and any preparation that may be needed. This may take place in a clinic in the hospital or over the phone. Please have a list of all your medications available. You may need a blood test before your biopsy to check that you do not have an increased risk of bleeding following the biopsy. The pre-assessment nurse will discuss this with you.

On the day of your procedure, you can have a light meal and drink clear fluids up to 2 hours before your appointment.

Report to the area stated on your appointment letter (this may be the Radiology/Imaging department or a Ward), where you will be asked to change into a hospital gown.

Although most people go home on the same day there is a possibility that you may need to stay in hospital overnight, so please bring an overnight bag with you.

You will not be able to drive after the procedure and will need to arrange transport home.

Can I bring a relative/friend?

Yes, but for reasons of safety they cannot join you in the CT scanning room except in special circumstances.

Giving your consent (permission)

We want to involve you in the decision about your care and treatment. The radiologist will explain the procedure and risks to you and give you the opportunity to ask questions. If you decide to go ahead you will be asked to sign a consent form. This states that you agree to the procedure and understand what it involves.

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What happens during the procedure?

You will be taken into the scanning room and made comfortable on the bed. You may be asked to lie on your back, side or front. This is dependent on where the biopsy is to be taken from so it is important for you make sure you are reasonably comfortable before the radiologist starts. You will need to lie as still as possible during the procedure.

A scan will be taken of the relevant area to locate the exact position for the insertion of the biopsy needle. The skin over the area will be cleaned with antiseptic and then numbed using a local anaesthetic before the biopsy needle is inserted and the tissue sample taken. You may be asked to hold your breath during the procedure so it is important that you take the same 'depth' of breath each time.

After the biopsy the area will be cleaned and a dressing put over the wound site.

Will the procedure be uncomfortable?

The biopsy is performed under local anaesthetic which may sting slightly and you may feel some pressure as the doctor pushes on the needle. Most people do not feel much pain during the biopsy.

What are the risks involved?

A biopsy is a safe procedure but complications can sometimes arise.

- The main risk is of causing an air leak (pneumothorax) into the space around the lung. A small air leak is common and usually does not cause any problems and gets better on its own. Large air leaks are much less common. If this happens then the air will need to be drained through a tube inserted through the skin and you will need to stay in hospital overnight.
- Some patients cough up a small quantity of blood. This is nothing to be alarmed about and will not prevent you from going home.
- You may notice a small amount of bruising around the wound site due to bleeding into the skin.

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- If the sample taken does not provide a diagnosis the procedure will need to be repeated at a later date.

CT scanning does involve X-rays and has the usual risks associated with ionising radiation. The amount of radiation is equal to the natural radiation we all receive from the atmosphere over a period of about 3 years.

How long will the procedure take?

Every patient is different so it is not possible to give a definite timeframe. The procedure will take about 30 minutes to carry out. However, following the biopsy you will need to remain in the department for 1 hour.

A chest X-ray may be performed before you are able to go home. You may have to wait a further hour and have a repeat chest X-ray if you develop a pneumothorax.

What happens after the procedure?

After the biopsy you will be looked after in the recovery area by a radiology nurse who will monitor your blood pressure, pulse, temperature and oxygen levels at regular intervals. They will advise you when you are able to get up and move around.

You must have an adult to take you home and stay with you for 24 hours following the biopsy. You should avoid heavy lifting, exercise or straining for 24 hours. If you have any pain you may take a mild pain relief such as paracetamol. You should not drive for 24 hours following the procedure.

You should not travel by air for 6 weeks after a lung biopsy.

Are there any side effects?

Not usually. You should spend the remainder of the day resting. If you notice any bleeding from the site or feel unwell please contact your GP immediately.

If you experience severe chest pain, shortness of breath or cough up large volumes of blood you should go to the Emergency Department immediately.

Can I eat and drink afterwards?

Yes, do so normally.

When will I get the results?

Shortly after your visit the biopsy sample will be sent for tests. The results of these tests will be sent to your referring doctor.

Cancelling your appointment

If you are unable to attend your appointment we would be grateful if you could contact us as soon as possible. We can then offer your appointment to another patient and arrange another date and time for you.

If you have had diarrhoea and vomiting (D & V) please cancel your appointment unless you have been free of symptoms for 48 hours.

Contact information

Please ring the CT Appointments Officer on the number shown on your appointment letter, between 9:00am and 4:30pm, Monday to Friday.

If you do not believe you should have been referred for this procedure please contact the CT department immediately.

Alternatively, you can contact your consultant's secretary or one of the Cancer Nurse Specialists.

**Cancer Nurse Specialist
Cheltenham General Hospital**

Tel: 0300 422 2379

Gloucester Royal Hospital

Tel: 0300 422 2222 and ask for the operator when prompted. When the operator responds ask them to bleep 2649.

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We are pleased that we can offer state of the art technology for diagnosis. However, radiology equipment needs constant updating and there is a charitable fund for this. If you would like to make a donation, please send a cheque to the appropriate address below. Cheques are payable to GHNHSFT.

Please send your donation to:
Business Manager
Dept of Radiology (Imaging 1)
Gloucester Royal Hospital
London Road
Gloucester
GL1 1NN

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