

# CT Guided Biopsy

Information for patients



This leaflet contains important information about your scan.

Please read all sections of the leaflet carefully and follow the important instructions.

## **Patient Information Leaflet: CT scans**

This leaflet explains what happens during a computerised tomography (CT) scan and biopsy. It tells you what is involved and about the risks and benefits of having the tests.

If you weigh more than 203kg, or 32 stone, please contact us using the telephone number at the top of your appointment letter as soon as possible. We are only able to scan patients above 203kg at one site and your appointment may need to be re-arranged.

### **What is a CT scan?**

This is a type of scan which uses X-rays linked to a sophisticated computer to create detailed pictures of your body in 'slice sections' or 'cross sections'.

The CT scanner is an open ring-like structure, which looks a bit like a giant doughnut, rather than a tunnel as everybody expects!

A more detailed explanation of the scanning procedure is given on the following pages.

### **What is a CT Guided Biopsy?**

Other tests that you have had, such as a previous CT scan or ultrasound scan, have shown an area of abnormal tissue inside your body. A biopsy involves collecting a small sample of this tissue.

We will use a CT scan to show us an image of the abnormal area. This image is then used by the radiologist to guide a fine needle to the right place and collect tiny pieces of tissue.

## **Can I take my prescribed medicines as usual?**

We will have called you to ask about any medications you are taking and advised you if you need to stop some medications. This may include telling you to stop taking blood thinners.

### **Caution**

Keep all tablets and medicines out of reach of children. Never give any medicines prescribed for you to anyone else.

## **What clothing should I wear?**

You may wish to wear loose clothing that can be removed easily. You will be asked to change into a hospital gown.

## **Can I bring a relative or friend?**

Yes, but they will not be able to go with you into the scan room, except in special circumstances. They can wait in the Day Case Ward or can leave and return later. We can telephone them to let them know when you are ready to be collected. We are unable to care for young children whilst you are having your scan.

### **Interpreter**

If you require an interpreter, please let us know.

Please be aware that it is Trust policy that family, friends and other companions cannot act as an interpreter for you.

## **What are the benefits?**

The doctors looking after you have decided that you should have a biopsy to help them make a diagnosis and decide on the most suitable treatment for you.

## Are there any risks?

CT guided biopsy is considered a safe procedure. Small risks vary depending on where we take the biopsy from. The main complications are bleeding or infection. These complications occur very rarely, in less than 1 in 100 biopsies.

Despite these small risks your doctor has decided to refer you for this examination. This is because they feel that the benefits of having the biopsy outweigh the risks of having it done.

The doctor performing the biopsy will discuss the specific risks with you before asking your permission (consent) to perform the biopsy.

### Exposure to radiation

During a CT scan you will be exposed to X-ray radiation. We are all exposed to background radiation from the ground, building materials and the air, every day of our lives. This is normal and natural. Medical X-rays give an additional dose and the amount of radiation you're exposed to during a CT scan varies, depending on how much of your body is scanned.

Generally, the amount of radiation you're exposed to during each scan will range from the equivalent of a few months to a few years of exposure to natural radiation from the environment. It's thought exposure to radiation during CT scans could slightly increase your chances of developing cancer many years later, although this risk is thought to be very small and less than 1 in 1,000.

The benefits and risks of having a CT scan will always be weighed up by your doctor and the specialists in Radiology before your CT scan. They will ensure that this is the best procedure for you to have to diagnose or treat your condition. The Radiographers always ensure that the radiation dose is kept as low as possible and CT scanners are designed to make sure you're not exposed to unnecessarily high levels.

**For more information, read GOV.UK patient dose information.**

Visit: [www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance](https://www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance)

## **Contrast Injection**

Some people will require a contrast injection. The contrast injection contains iodine, which can cause an allergic reaction in a few people. You should tell the Radiographers who are carrying out the scan if you have had an allergic reaction to iodine or contrast dye in the past, or if you have any other allergies. Very rarely the dye may cause some kidney damage in people who already have kidney problems. We will ask you to complete a questionnaire on the day of the examination before the procedure takes place, to assess the risks of giving you the contrast dye. We may also take a small sample of your blood to test your kidney function.

There is a small chance that the contrast injection can leak outside the vein and cause temporary swelling and discomfort in the arm. This does not happen very often. In the unlikely event of this happening, we will provide you with further instructions and advice.

## **How do I prepare for the biopsy?**

Please do not eat anything for 6 hours before your procedure, for safety reasons. You may drink water up to 2 hours before your procedure.

We will have called you to ask about any medications you are taking. It is important that you also tell us about over the counter and herbal remedies. We may tell you to stop some medications.

If we tell you to continue taking your regular medication, please make sure that you only take it with a small amount of water on the day of your biopsy. Please bring any medication that you normally take with you.

Please leave any valuables at home. You should bring your toiletries and nightwear with you, in case you need to stay in hospital overnight after your biopsy.

We advise you not to drive after the biopsy, as your insurance may not cover you. Please arrange for someone to drive you home after the biopsy.

## On the day of the examination

Please check your appointment letter carefully for your appointment date, time and location.

Most biopsies are performed as an outpatient or day case procedure. This means that you should be able to go home a few hours after the procedure. You will have been told if you are to attend the radiology day care unit or a hospital ward.

When you are to be admitted to a ward or day case unit you will first be seen by the nurses and medical staff. They may carry out assessments on you such as pulse and blood pressure checks.

They may take some blood samples if this is necessary. (Sometimes a GP will take blood samples before you come into hospital, if they are required.)

You may also be given forms to read and complete. One of these forms relates to pregnancy status. Oxford University Hospitals is an inclusive organisation who recognises and accepts the diverse community that it is part of. This has resulted in the organisation reviewing many of its processes and procedures to make sure they are in line with this, with the safety and protection of individuals being at the centre of any changes or adjustments. We are now asking the childbearing capacity questions to all patients, regardless of their gender.

Your clinician has requested diagnostic imaging that requires an exposure to radiation. As radiographers, it is our professional duty and legal responsibility to ensure that we protect individuals from unnecessary exposures to radiation. This is particularly relevant when considering any potential exposure of an unborn baby to ionising radiation, as they are at greater risk from the harmful effects of radiation. If we cannot exclude that you are not pregnant, we may need to rebook your scan.

**If there is any possibility that you might be pregnant, please contact the Radiology department before your appointment.**

A radiologist will talk through the procedure with you and will check your permission to carry out the biopsy. You will be asked to sign the consent form, if you have not already done so.

When your biopsy is due to start, a member of staff will take you to the CT scan room.

## **What happens in the CT scan room?**

In the scan room the radiographers will explain the CT scan and tell you what to expect.

You will have a scan first so that the radiologist can see where the biopsy needle should be put in. You will be asked to lie either on your back or your front on the scanning table. The scanning table moves the part of your body to be biopsied forwards and backwards through the centre of the scanner. The CT scanner is not noisy.

You may be asked to hold your breath whilst the scanner takes the pictures. We do understand that some people have difficulty holding their breath; please tell us if this is difficult for you.

## **What happens during the biopsy procedure?**

For the biopsy, the radiologist will clean your skin with antiseptic and the area in question may be covered with sterile towels.

The radiologist will make your skin and deeper tissues go numb by injecting them with local anaesthetic. Once the anaesthetic has taken effect the biopsy needle will be guided into the abnormal tissue.

Several scans will be taken of the needle to make sure it is in the right place before the samples of tissue are taken (up to eight samples). There will be staff with you at all times to reassure you if you are worried.

When the radiologist takes the biopsy, the needle that they use makes a snapping sound. The radiologist will warn you when this is about to happen.

The biopsy site will be 'dressed' with a small bandage or plaster.

The procedure should take between thirty minutes to an hour.

## **Will it hurt?**

Most biopsies do not hurt. Some people feel a scratch and stinging sensation when the local anaesthetic is injected, but the skin should then become numb.

After this you will be aware of some pushing or sensations of pressure, but not pain. If it is painful more local anaesthetic can be injected. Your skin will stay numb for between 30 minutes and a few hours. It will then wear off. This can make the area feel you like you have 'pins and needles'.

## **What happens next?**

After the biopsy you will be transferred to a bed and taken to the ward.

You will have to rest and will have checks of your pulse and blood pressure after the procedure. This is done either on the ward or in the radiology department. This is to make sure there is no internal bleeding.

## **What happens when I go home?**

If all checks are satisfactory, you may be able to go home the same day but must rest until the next day. Some patients may need to stay in hospital overnight if there have been any complications, but this is very rare.

We advise you not to drive home after the procedure, as your insurance may not cover you. Please arrange for someone to drive you home after the biopsy.

If you are going home on the same day as your biopsy, a relative or friend should accompany you home and stay with you overnight.

When you go home you can eat and drink normally. You should rest until the next day. You should not attempt to return to work on the day of your needle biopsy.



## **We advise you not to do the following activities for 24 hours following the procedure:**

- drive
- heavy lifting
- drink large amounts of alcohol
- anything which requires a lot of effort or makes you strain, such as gardening, operating machinery, decorating or sexual intercourse.

We will give you an information sheet to take home with you, which explains what to do and who to contact if you have any problems after the procedure.

## **Will the biopsy give an answer?**

Unfortunately, not all biopsies are successful. Sometimes the sample of tissue does not provide the answer.

## **When and how will I know the result of the biopsy?**

You will not receive the results straight away.

The results of the biopsy are sent to the doctor who referred you. The biopsy will give us a diagnosis in about 9 out of every 10 patients. The results of your biopsy will be available after about a week. The doctor who referred you will tell you the results of the biopsy and what happens next.

If you do not have another outpatient appointment and do not hear anything about the results within three weeks, please telephone the referring doctor or their secretary for advice. If you do not have their number, please telephone the hospital switchboard, and ask to be put through to them:

Telephone: **0300 304 7777**

## Questions or concerns

If you have any questions or concerns either before or after the biopsy, please contact the Radiology department.

Telephone: **01865 235 753**  
(Monday to Friday 8am to 5pm)

## Further information

Further information about CT scans is available on the following websites:

### **The Society of Radiographers**

There are short videos showing the way in which X-rays and scans are used, including CT scanning.

Visit: [www.sor.org](http://www.sor.org) and search for 'patient information'

### **Impact scan**

Visit: [www.sor.org](http://www.sor.org) and search for 'impact scan CT patient guide'

### **NHS Choices**

Visit: [www.nhs.uk/conditions/ct-scan/](http://www.nhs.uk/conditions/ct-scan/)

### **For further information about the Oxford University Hospitals NHS Foundation Trust:**

Visit: [www.ouh.nhs.uk](http://www.ouh.nhs.uk)



## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust  
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