CT guided biopsy
Information for patients
The radiology department has received a request for you to have a CT guided biopsy. This leaflet tells you what to expect.

- If you weigh more than 177kg or 28 stone please tell us immediately.
- If you are eligible for hospital transport to reach the hospital, please tell us immediately.

**What is a CT (Computed Tomography) scan?**

This is a type of scan which uses x rays to make detailed images of your body in ‘slice sections’. These images are examined by a radiologist (a doctor qualified to read x-ray images).

The CT scanner looks like a large open white ring, rather than the tunnel that everybody expects!

**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.

You will be given a local anaesthetic to make the area of the biopsy go numb. A small incision (cut) will be made into your skin and a tissue sample taken. This will be sent to the laboratory to be examined under a microscope by a pathologist.

We use the CT scanner to take images of the needle as we collect the biopsy to make sure the correct sample of tissue is taken.

The biopsy will provide a diagnosis for more than 9 out of 10 patients. It will help your doctors to choose the most appropriate treatment for your condition.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>Who has made the decision for me to have a biopsy?</td>
<td>The consultant in charge of your case has referred you to the radiologist.</td>
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<tr>
<td>Who will be doing the biopsy?</td>
<td>A radiologist will take the biopsy. Radiographers operate the scanner and health care assistants will help both the radiologists and radiographers.</td>
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<td>Can I bring a relative/friend?</td>
<td>Yes, but for reasons of safety they will not be able to go with you into the CT scan room, except in very special circumstances.</td>
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<td>Are there any risks or other complications?</td>
<td>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.</td>
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What should I do to prepare for the procedure?

Please do not eat for 6 hours before your procedure. You may drink water up to 2 hours before your appointment.

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

Unless we have told you otherwise, continue to take your regular medication as usual, with a small amount of water.

What happens at the Hospital?

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. Some cases require general anaesthetic. You will have been told if you are to have a general anaesthetic and if you are to be admitted to a hospital ward.

If 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.)

The CT scanning staff will come to collect you from the ward, day unit or waiting room (if you are an outpatient) when they are ready to do the biopsy.
What happens in the CT scanning department?

When you arrive in the CT scanning department the radiologist will explain the biopsy procedure in detail. They will also discuss any relevant risks and will ask you to sign a written consent form for the examination to go ahead.

The radiologist will also ask if you will allow the biopsy sample to be stored so that it may be used for research. This may benefit other patients in the future; the biopsy will be performed in the same way whether you answer yes or no. If you have any questions or concerns, please ask the doctor.

It may be necessary for you to drink a special fluid which will help to show up your bowel on the CT scan. You also may need to have a small cannula (tube) inserted into a vein in your arm. These additional actions will be discussed with you before the procedure if you need to have them done.

What happens in the scan room?

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

You will have a first scan 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.

The radiographers will control the scanner. The radiology assistants will be able to see and hear you at all times through a connecting window and an intercom.
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.

How long does the procedure take?
It should take between thirty minutes and 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?
The biopsy site will be ‘dressed’ with a small bandage or plaster. If the puncture site (where the needle was put in) is still bleeding when you take this dressing off, please re-cover it with a plaster.

If you are an inpatient or a day case patient you may 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.
When can I go home?

If all of the above checks are satisfactory you may be able to go home the same day but must rest until the next day. You must not drive yourself home on the day of the procedure. A relative or friend should accompany you home and stay with you until the next day.

You should not go home on public transport after this procedure. You will need to be taken home by car or taxi. This will be more comfortable for you and also quicker for you to return to the hospital if there are any complications on the journey home.

Some day case or inpatients may need to stay in hospital overnight if there have been any complications, but this is very rare.

When you go home you can eat or drink as you would normally.

Will the biopsy give the answer?

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

Will I get the results straight away?

No. The biopsy sample is sent to the laboratories for analysis. This can take up to one week.

The result will be sent out ready for your next outpatient appointment.

If you do not have another outpatient appointment and do not hear anything within three weeks, you should telephone your consultant’s secretary for advice.
If you have any queries we will be happy to answer questions on the day of the biopsy. You can also telephone us on number given on the appointment letter.

You can find further information on the following websites:

www.impactscan.org/patientguide.htm
www.rcr.ac.uk or www.goingfora.com
www.ouh.nhs.uk
www.nhsdirect.nhs.uk

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473 or email PALSJR@ouh.nhs.uk