Mersey and West Lancashire Teaching Hospitals
NHS Trust

Having a Radiology guided biopsy

Patient information leaflet

If you need this leaflet in a different language or accessible format please speak to a member of staff who can arrange it for you.

اگر به این بروشور به زبان دیگر یا در قالب دسترس‌پذیر نیاز دارید،
لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie,
proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil,
vă rog să discutați cu un membru al personalului să se ocupe
de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式，请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أُخرى، أو بتنسيق
يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

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Introduction

Having a Radiology guided biopsy

You have been advised by your hospital consultant that you need to have a biopsy performed in the Radiology (X-ray) Department under ultrasound or CT. This information tells you about having a biopsy, what is involved, and what the possible risks are.

The biopsy is usually performed as a planned procedure, and you should have plenty of time to discuss the situation with your doctor or the nurse specialist looking after you before you sign the consent form.

When you arrive for the procedure, you will also discuss the procedure with the Radiologist, (a doctor who specialises in X-rays and scans), who will be performing the procedure and who will again sign the consent form with you.

If after discussion with your hospital doctor or Radiologist, you do not want the procedure carried out, then you can decide against it. If the Radiologist thinks that your condition has changed or that your symptoms do not indicate such a procedure is necessary, then they will explain this to you and they will communicate with the referring doctor who will review your situation as soon as possible. At all times the Radiologist and referring doctor will be acting in your best interests.

What is a biopsy?

A biopsy is a way of taking a small piece of tissue out of your body using only a tiny cut in the skin and a thin needle. The biopsy will then be examined under a microscope by a pathologist (an expert in making a diagnosis from tissue samples).

This method of taking a biopsy is sometimes referred to as a percutaneous biopsy. The biopsy will be performed by a Radiologist who will be assisted by a Radiographer and / or a Radiology nurse. It is not always easy to predict how complex or how straightforward the procedure will be and therefore how long it will take.

As a guide, expect to be in the Radiology Department for about 45 minutes to one hour. However, much of this time is taken up by preparation rather than the procedure itself. You will normally be expected to rest on the ward for at least four hours after the procedure. If you have been admitted specifically for this procedure as a day case patient, you should then be able to go home. In some cases, you may be asked to stay overnight.

What to expect on your visit

Who will you see?

A specially trained team of Radiographers and Nurses, led by Radiologist within the Radiology Department. Radiologists have special expertise in reading the images and using imaging to guide needle position to aid diagnosis and treatment. All members of the team will be in scrubs during the procedure but will introduce themselves to you

The biopsy will take place in the Radiology Department in either the CT Department, Ultrasound or Interventional Department. Which imaging modality is to be used will depend upon the location, type, and accessibility of the tissue to be biopsied, and will be decided by the Radiologist before your appointment is made.

Interventional Suite:



CT Scanner:



Ultrasound:



Preparation

What is a CT scan?

A CT scan is an X-ray examination that gives much more information than a normal X-ray. It produces detailed 3D images of your organs and blood vessels.

What is Ultrasound?

An ultrasound scan is an examination that uses sound waves to take pictures of the part of the body being examined. It does not involve X-rays.

Preparation for your biopsy

You will have had some special blood tests to check your blood clotting ability four to five days before your appointment or occasionally on the same day as your appointment in order to check that you do not have an increased risk of bleeding. The procedure may have to be postponed until your clotting ability has improved.

On the day of your procedure, please do not eat or drink anything, you may have sips of water if necessary. You will need a cannula (small tube) inserted into a vein in your arm to allow access for fluids and for administering medication.

You will need to wear a hospital gown. The porters will collect you from the ward and bring you to the X-ray Department, on your bed, for the procedure.

Biopsy procedure

You will be asked to lie on the examination table. It is important that you stay very still until the procedure is over. If you are uncomfortable, please let the doctor know. An ultrasound machine or a CT scanner will be used to decide on the most suitable place for inserting the biopsy needle. This area may be marked with a pen.

Everything will be kept sterile and the Radiologist will wear sterile gloves. Your skin will be cleaned with cold antiseptic solution and sterile drapes will be placed over this area. Then your skin will be numbed with local anaesthetic. When the local anaesthetic is injected, it will sting to start with, but this soon wears off and the skin and deeper tissues should then feel numb. The Radiologist will insert the thin biopsy needle whilst looking at the images to ensure accuracy of positioning.

You may be aware of a pushing sensation as the needle is positioned, but this is generally done so quickly that it does not cause much discomfort. If the procedure does become painful you should tell the Radiologist performing the biopsy and they may give you more local anaesthetic. The first part of the procedure when the equipment is being prepared may seem to take a while, but the biopsy itself does not take very long at all.

Once in place the needle often makes a small clicking noise when the biopsy is taken; this should not alarm you. The Radiologist may need to take two to three samples. When the procedure is finished, a small plaster will be placed to cover the incision and you will be returned to the ward.

After your examination

The Radiology nurse will continue to look after you until you are sent back to the ward. Once you have returned to your ward, nurses will carry out close and regular observations, such as taking your pulse, blood pressure and temperature, to make sure that there are no problems. You will stay in bed for 1 to 4 hours depending upon your procedure. You should tell the nurses if you feel pain or a raise in your body temperature. You may be given more antibiotics. You should drink plenty of fluids and eat normally.

If you have any problems after the procedure, please speak to the staff on the ward or contact your GP or emergency doctor if problems occur when you have returned home

How do I get the results?

The results will not be given to you immediately. They will be sent by the Pathology Department to the doctor who referred you to us for this examination and who will then discuss them with you at a future out-patient appointment in clinic.

What are the risks?

Risks of the procedure

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet. The possibility of these occurring will vary for each patient and the possibility of these happening to you will be discussed with you before you sign the consent form.

- Bleeding: Any biopsy carries a small risk of bleeding. On rare occasions, this may become severe.
- Infection: Occasionally there may be infection in the area surrounding the biopsy site. This can usually be treated with antibiotics.
- Damage to underlying tissues: Rarely, as the biopsy needle passes through the body to the target area, surrounding tissues may be damaged.
- Unfortunately, not all biopsies are successful. This may be because, despite taking every possible care, the piece of tissue which has been taken is normal tissue rather than abnormal. Alternatively, although abnormal tissue has been obtained, it may not be enough for the pathologist to make a definite diagnosis. If you need any further investigations, they will be discussed with you in clinic.
- There may be soreness around the biopsy site and some bruising.
- Despite these possible complications, the procedure is normally very safe. At all times during and after the procedure the staff will be monitoring your responses to this treatment to minimise the effects of any complications.

Radiation

CT involves the use of radiation. Any examination using radiation is only performed when strictly necessary and it is thought the benefits of the examination outweigh any potential risks.
All imaging is performed using the minimum amount of radiation necessary, and is individualised for each patient depending on the size of the patient and the condition being investigated.

For more information on radiation please see the link below:
https://www.ukhsa-protectionservices.org.uk/radiationandyou/



Pregnancy

If you are, or think you could be pregnant, please contact us prior to your appointment on the phone number in your appointment letter.

Finally

The pictures taken during the examination are carefully studied by a Radiologist who will produce a detailed report. The results will be sent to the doctor who referred you for the test. They will discuss the results with you and any treatment you may need.

You may already have an appointment with the team who referred you. If not, please contact them to arrange one to discuss the results of this test.

If you have any further questions, please do not hesitate to call the Radiology Department via the number given on your appointment letter.

As this is a teaching hospital there may be students and observers present during your examination as part of their ongoing training. Please let the staff know if you do not wish any students to be present during your attendance.

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