

Percutaneous biopsy

Radiology

Introduction

The aim of this leaflet is to explain the procedure for patients undergoing a biopsy. This leaflet is not meant to replace informed discussion between you and your Doctor, but can act as a starting point for outlining risks and benefits.

What is a percutaneous biopsy?

A needle biopsy is a way of taking a small sample of tissue out of your body, using a special needle. This allows the doctors to look at the sample under a microscope to find out what it is. This will allow an accurate diagnosis and treatment plan for you. As this biopsy is done through the skin, it is called a percutaneous biopsy.

Who has made the decision?

The choice about which treatment is best for you will be made together with your Doctor. This will be based on the risks and benefits of the treatment and your individual circumstances.

Why do you need a biopsy?

Other tests that you have already had performed, such as an ultrasound scan or a Computed Tomography (CT) scan, will have shown that there is an area of abnormal tissue inside your body. From the scan, it is not always possible to say exactly what the abnormality is and the simplest way of finding out is by taking a tiny sample and to look at it under a microscope.

Who will do the procedure?

A Radiologist will perform the procedure. They have special expertise in interpreting the images and using imaging to guide wires and needles to aid diagnosis.

Consent

We must seek your consent for any procedure or treatment beforehand. A written consent will be obtained from yourself by a doctor to give permission to have the procedure done. Your doctor will explain the risks, benefits and alternatives where relevant before you sign the consent. A referral will be made and your appointment will be arranged. If you are unsure about any aspect of the procedure or treatment proposed please do not hesitate to ask for more information.

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

What are the potential risks of having a biopsy?

Serious complications are uncommon, but a number have been described as below:

- If you are having a kidney or spleen biopsy, then there is a risk of bleeding. This is a low risk. If the bleeding were to continue, then it is possible that you might need a blood transfusion
- For a liver biopsy the most common complication is pain at the procedure site. This pain may travel to the right shoulder. It can be controlled with pain killers
- For liver biopsies, bleeding may affect 1 in 200 patients. This settles by itself but 1 in 4 patients who bleed may require a blood transfusion. Very rarely, less than 1 in 500, an operation may be required to stop the bleeding
- If you are having a lung biopsy performed, it is possible that air can get into the space around the lung (pneumothorax). This generally does not cause any real problems. However if it causes the lung to collapse, the air will need to be drained, either with a needle, or with a small plastic tube, inserted through the skin
- The biopsy may fail to give an answer. This may be because normal tissue has been taken rather than abnormal tissue or the sample was not big enough
- There is a small risk that the biopsy may not be diagnostic. In this instance, a further biopsy or other procedure may be necessary
- Very rarely, the biopsy site may become infected. The skin should be checked until it heal
- Death as a result of the procedure is very rare.
- **Radiation:** Your procedure may involve exposure to radiation. Ionising radiation may cause cancer many years or decades after the exposure. We are all at risk of developing cancer during our lifetime. 50% of the population is likely to develop one of the many forms of cancer at some stage during our lifetime. It has been estimated that undergoing this procedure may increase the chances of this happening to you to about 0.1 %. The requesting doctor and the doctor that will be performing your examination feel that the benefit of having the test or treatment outweighs the risk from the exposure to radiation.

If you have further questions about the risk of exposure to radiation, please talk to your doctor during consent.

Please contact the X-ray department as soon as you receive this appointment if you think you may be pregnant.

What are benefits of having a biopsy?

- The procedure is minimally invasive meaning recovery time is quicker than a surgical biopsy procedure
- The sample taken may aid in diagnosis of the abnormal tissue.

Are there any alternative treatments and what if I decide not to have it done?

The consultant in charge of your care will discuss the alternatives with you. They will also discuss the consequences of no treatment during your consent.

Are you required to make any special preparations?

These procedures are usually carried out as a day case procedure under local anaesthetic (a medication used to numb an area of the body to reduce pain).

- Depending on your biopsy you may be able to eat and drink as normal. This information will be discussed during consent
- For liver biopsy patients, you must not eat for 4 hours before the biopsy but you may drink on the morning of the procedure.

If you are taking any medication it is important to discuss them with your doctor before the procedure as some may need to be stopped temporarily. Some medications include:

- Acenocoumarol, Apixaban, Aspirin, Bivalirudin, Dabigatran, Dalteparin, Danaparoid, Dipyridamole, Edoxaban, Enoxoparin (clexane) Fondaparinux, Heparin, Phenindione, Tinzaparin, Warfarin.

Where will the procedure take place?

The procedure will take place in the angiography suite; this is located within the Radiology Department. This is similar to an operating theatre in which specialised X-ray equipment has been installed.

If you are on a different ward, the Angiography Suite will liaise with your ward Nurse and Porters to arrange transport to your procedure.

If you require an ambulance to attend this appointment, please contact Patient Transport Service on 01902 694999.

If this is difficult for you to arrange, please inform your General Practitioner (GP), the Interventional Radiologist during your consent process or the Angiography Department (Interventional Radiology).

What happens during the procedure?

You will be asked to get undressed and put on a hospital gown. What happens does depend on where the abnormal tissue is in your body and which type of imaging is being used. Usually, you will lie on your back or front in the position that the Radiologist has decided is most suitable. The Radiologist will explain this to you before performing the biopsy. A biopsy is performed under sterile conditions. A Radiologist uses imaging to allow accurate access of the abnormal tissue through a minute incision. Local anaesthetic is injected at the procedure site. This may sting for a few seconds but then will go numb. All wires will be removed at the end of the procedure.

Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. Some discomfort may be felt when the biopsy sample is taken. Pain relief may be given at the time of the procedure if appropriate. You should discuss this with the doctor doing your procedure on the day.

How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the procedure room for about 30 minutes. If you are in pain, please ask the nurse for pain relief.

What happens afterwards?

- You will be taken back to your ward or the day case unit
- Nursing staff will carry out routine observations including pulse and blood pressure
- You will generally stay in bed for a few hours
- Depending on the biopsy, bed rest may be lying flat. During your bed rest you will be able to eat and drink
- If you are a day case you can usually go home after four hours of rest.

Going home advice

- Observe the puncture site for any bleeding or swelling
- You will not be able to drive, walk or travel home on public transport
- Ensure someone is able to collect you on discharge. You will not be allowed to go home alone
- A responsible adult must stay at home with you on the first night following the biopsy
- If you experience severe pain which may be related to the biopsy, call 111 or seek medical assistance at your local Emergency Department
- You are advised not to drive for 24 hours and avoid strenuous exercise for 48 hours.

Trainees

A Radiology Trainee (qualified experienced Doctors training in radiology) or occasionally a student may be present during the examination. If you would prefer them not to attend, please let a member of Radiology staff know.

How to contact us

If you have any personal access needs, require wheelchair access or wish to speak to a member of staff for further information please contact the Interventional Radiology Department on 01902 307999 ext. 86344 between 08:30 and 16:30 as the department cannot help with queries outside of these hours.

Angiography Suite / Interventional Radiology

Second floor Radiology A2
New Cross Hospital
Wolverhampton
West Midlands
WV10 0QP

Patient Advice and Liaison Service

New Cross Hospital
01902 695362
Email: rwh-tr.pals@nhs.net

Information taken from British Society of Interventional Radiology

http://www.bsir.org/static/uploads/resources/BSIR_Patient_Leaflet_Percutaneous_Biopsy.pdf

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਅਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。