

# Percutaneous Soft Tissue Mass or Lump Biopsy

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## Introduction

This leaflet tells you about the procedure known as percutaneous biopsy. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

Whether you are having the percutaneous biopsy as a planned or an emergency procedure, you should have sufficient explanation before you sign the consent form.

Radiologists are doctors specially trained to interpret the images and carry out more complex examinations. They are supported by Radiographers who are highly trained to carry out x-rays and other imaging procedures.

## What is a percutaneous biopsy?

A needle biopsy is a way of taking a small piece of tissue out of your body, using only a tiny incision, so that it can be examined under a microscope by a Pathologist, an expert in making diagnoses from tissue samples. It is called a percutaneous biopsy because this biopsy is carried out through the skin.

## Why do I need a percutaneous biopsy?

Other tests that you probably have had performed, such as an ultrasound scan, CT scan or MRI scan, will have shown that there is an area of abnormal tissue inside your body. From the scan, it is not always possible to determine

the true nature of the abnormality, and the simplest way of finding out is by taking a tiny piece of it away for a Pathologist to examine.

## Who has made the decision?

The Consultant in charge of your care will have come to this decision after reviewing your imaging with a Radiologist. However, you will also have the opportunity to discuss your options with your doctor, considering both the risks and benefits of the procedure. Ultimately, the decision whether or not to proceed is yours.

## Who will be performing the percutaneous biopsy?

A specially trained doctor called a Radiologist or a Specialist Practitioner. Both Radiologists and Specialist Practitioners have expertise in using x-ray and scanning equipment, and also in interpreting the images produced. They will look at these images while carrying out the biopsy.

Radiographers and Radiology Nurses will be present in the room to assist during the procedure, they will introduce themselves at the start of the procedure.

Occasionally radiologists in training will perform part or all of the procedure under the supervision of an experienced consultant. Student radiographers or medical students may also be present.

## What are the options or alternatives?

This is the simplest way to obtain tissue and make a diagnosis. The alternative would require an open operation.

## Where will the biopsy take place?

Generally, in the Medical Imaging Department.

## How do I prepare for percutaneous biopsy?

You may need to be an inpatient in the hospital, although many biopsies can be performed as an outpatient / day case.

You will have had some blood tests performed before the procedure to check that you do not have an increased risk of bleeding.

You are asked not to eat for 4 hours prior to the procedure. You may drink a little water.

You will need someone to drive you home and to look after you for 24 hours.

You should be prepared to stay overnight if necessary.

If you have any allergies or you have previously reacted to intravenous contrast medium, you must let the doctor know. Intravenous contrast medium is the injection we give you during some scans.

If you are diabetic, please contact the Medical Imaging Department on **01392 402336 selecting option 2, in-patient enquiries, option 6** Interventional Procedures.

If you normally take any medication to thin your blood (anticoagulation or antiplatelet drugs) then these may need to be stopped or altered. Please contact the Medical Imaging Department on **01392 402336 selecting option 2**, in-patient enquiries and then **option 6** for X-ray Special Procedures. Examples of these medication include:

- Warfarin, Phendione, or Acenocoumarol
- Clopidogrel, Ticagralor or Aspirin
- Non-steroidal anti-inflammatory drugs (NSAIDS) (Ibuprofen, Naproxen)

- Dabigatran (Pradaxa), Rivaroxiban (Xarelto), Apixaban (Eliquis), or Edoxaban (Lixiana)

Other medication should be taken as normal.

A pregnancy test may be performed on arrival.

## What actually happens during a percutaneous biopsy?

You will lie on the x-ray, ultrasound or scanning table, in the position that the Radiologist has decided is most suitable. You may need to have a needle put into a vein in your arm, so that the radiologist can give you a sedative or painkillers.

The Radiologist will keep everything as sterile as possible, and will wear a theatre gown and operating gloves. Your skin will be cleaned with antiseptic, and you may have some of your body covered with a theatre towel. The radiologist will use the ultrasound machine or the CT scanner to decide on the most suitable point for inserting the biopsy needle. Your skin will then be anaesthetised, and the biopsy needle inserted into the abnormal tissue.

While the first part of the procedure may seem to take a while, actually performing the biopsy does not take very long at all, and the needle may be in and out so quickly that you barely notice it.

## Will it hurt?

You may experience some discomfort during the procedure, however the members of staff in the room will provide pain relief and local anaesthetic. When the local anaesthetic is injected, it will sting to start with, but this soon passes off, and the skin and deeper tissues should then feel numb. Later, you may be aware of the needle passing into your body, but this is generally done so quickly that it does not cause any discomfort at all.

## How long will it take?

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. It may be over in 30 minutes, although you may be in the Medical Imaging Department for about an hour altogether.

## What happens afterwards?

This will depend on the type of biopsy being performed. You will be monitored in the Medical Imaging Department for a period of time. Some biopsies are lower risk and you will be able to go home as soon as 30 minutes after the procedure. Other higher risk procedures require up to 6 hours bed rest, which is usually observed on a ward within the hospital. Rarely, an overnight stay can be needed if there are concerns over a complication.

## What will happen to the results?

A report of the procedure will be recorded on your electronic patient record immediately and also sent to your specialist within 48 hours.

Do not expect to get the result of the biopsy before you leave, as it takes several days for the Pathologist to do all the necessary tests on the biopsy specimen.

## Are there any risks or complications?

Percutaneous biopsy is a very safe procedure, but there are a few risks or complications that can arise, as with any medical treatment.

There is a small risk of bruising, bleeding and infection, this does not normally need treatment. There may be a small risk of causing damage to nearby tissues.

Unfortunately, not all biopsies are successful. This may be because, despite taking every possible care, the piece of tissue which has actually been obtained 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. The specialist performing your biopsy may be able to give you some idea as to the chance of obtaining a satisfactory sample.

Despite these possible complications, percutaneous biopsy is normally very safe, and is designed to save you from having a bigger procedure.

## Finally...

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure, before you sign the consent form.

## Contact us

If you found reading your leaflet difficult, you do not understand what it means for you, or if you have any queries or concerns you can contact us on: **01392 402336** and we can talk it through.

## How to get to the Royal Devon & Exeter Hospital at Wonford

**Please refer to the enclosed "Welcome to the Medical Imaging Department" leaflet or use the Trusts website for the latest information:**

**[www.royaldevon.nhs.uk/our-sites](http://www.royaldevon.nhs.uk/our-sites)**

For more information on the Medical Imaging Department, please visit our website:

**[www.royaldevon.nhs.uk/services/medical-imaging-radiology-x-ray/medical-imaging-eastern-services/](http://www.royaldevon.nhs.uk/services/medical-imaging-radiology-x-ray/medical-imaging-eastern-services/)**

*This leaflet was modified with acknowledgment of, and permission from, the Royal College of Radiologists*

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