

# Percutaneous Lymph Node Biopsy (CT)

## Introduction

This leaflet tells you about the procedure known as percutaneous lymph node 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 lymph node 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 lymph node biopsy?

Other tests that you probably have had performed, such as an ultrasound scan or a CT scan, will have shown that there is an area of abnormal lymph node tissue inside your body.

From the scan, it is not always possible to say exactly what the abnormality is due to, and the simplest way of finding out is by taking a tiny piece of it away for a pathologist to examine.

## What are the options or alternatives?

The only realistic alternative to obtain a tissue diagnosis is an open operation.

## Who has made the decision?

The consultant in charge of your case, and the radiologist will have discussed the situation, and feel that this is the best thing to do. However, you will also have the opportunity for your opinion to be considered, and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

## Who will be performing the percutaneous biopsy?

A specially trained doctor called a radiologist. Radiologists have special expertise in using x-ray and scanning equipment, and also in interpreting the images produced. They need to 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 student radiographers or medical students will be present to observe the procedure.

## Where will the biopsy take place?

Generally in the CT scanner, occasionally an ultrasound scanner is used.

## How do I prepare for percutaneous biopsy?

- 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 8 for radiology nurses.**
- If you normally take any medication to thin your blood (anticoagulation or antiplatelet drugs) such as: **warfarin / clopidogrel / aspirin / non-steroidal anti-inflammatory drugs (NSAIDs / brufen / ibrufen / nurofen) / dabigatran (Pradaxa) / rivaroxiban (Xarelto) / Apixaban (Eliquis) / phendione / acenocoumarol** – then these may need to be stopped or altered. Please seek the advice of your hospital consultant or nurse specialist as soon as possible, ask your GP, or contact the Medical Imaging Department on **01392 402336 selecting option 2, in-patient enquiries and then option 8 for the radiology nurses.**
- After discussion with your GP or referring clinician, and you can safely stop these medications it is recommended that:  
Warfarin is stopped 6 days prior to your procedure.  
Aspirin is stopped 7 days prior to your procedure.

Clopidogrel is stopped 7 days prior to your procedure.

NSAIDs are stopped 2 days prior to your procedure.

Rivaroxaban (Xarelto) and Apixaban (Eliquis) are stopped 2 days before your procedure.

If you are taking Dabigatran (Pradaxa) please consult your doctor or contact the Medical Imaging Department on **01392 402336 selecting option 2, in-patient enquiries and then option 8 for the radiology nurses.**

- 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 CT scanner, in the position that the radiologist has decided is most suitable.

The radiologist will keep everything as sterile as possible. 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 CT scan to decide on the most suitable point for inserting the biopsy needle. Your skin will be then 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?

Most biopsies do not hurt at all. 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.

There will be a nurse, or another member of clinical staff, standing next to you and looking after you. If the procedure does become painful for you, then they will be able to arrange for you to have more painkillers through the needle in your arm.

## 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?

You will usually be asked to remain in the nursing recovery area for a short period of observation, or returned to the ward.

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

You should be prepared to stay overnight if needed.

## What will happen to the results?

A report of the procedure will be recorded on your electronic patient record immediately for review by your specialist.

Do not expect to get the result of the biopsy before you leave, as it always takes a few 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 bleeding and bruising but this is rare.

There is a very small risk of perforating bowel or damaging adjacent organs during the procedure and this may require further treatment.

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 radiologist 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, 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 and use the Trusts website for the latest information:

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

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

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

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

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