



Percutaneous Biopsy

Patient Information

The information herein explains to 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.

What is a percutaneous biopsy?

A needle biopsy is a way of taking a small piece of tissue out of your body. A needle biopsy can take on two forms dependant upon the type of area to be biopsied as well as /or/ determined by the Radiologist to yield the most diagnostic result.

1) A Fine needle biopsy (FNA) involves using a very fine needle to under imaging control to gain a sample of tissue, so that it can be examined under a microscope by a pathologist, an expert in making diagnoses from tissue samples. Because this biopsy is done through the skin, it is called a percutaneous biopsy.

2) A Core biopsy is a slightly more invasive procedure that involves a small incision into the skin and a specialist needle biopsy gun is used to retrieve a larger tissue sample for pathological analysis.

Why do I need a percutaneous 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 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.



Who has made the decision?

The doctor in charge of your case, and the radiologist doing the biopsy 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 doing 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.

How do I prepare for percutaneous biopsy?

Generally there are now specific preparations required. However, there may be the occasion where you may need to have some blood tests performed beforehand, to check that you do not have an increased risk of bleeding. Dependant on the location of the biopsy, you will probably be asked not to eat for four hours beforehand, though you may be allowed to drink some water. You may receive a sedative to relieve anxiety. You will be asked to put on a hospital gown.

If you have any allergies, you must let your doctor know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans), then you must also tell your doctor about this.

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. The radiologist will keep everything as sterile as possible, and may 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 may then be anaesthetised as determined by the radiologist, and the biopsy needle inserted into the abnormal tissue.



While the first part of the procedure may seem to take a while, actually doing 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, although unfortunately bone biopsies may be painful. 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. If the procedure does become too painful for you, then the radiologist will administer additional anaesthetic if appropriate.

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 x-ray department for about an hour altogether.

What happens afterwards?

Generally there are no per-procedural complications and you are OK to leave the department and go about daily activities or as indicated by the radiologist. If a complication does arise then the radiologist and medical staff will treat you accordingly.

What happens next?

All being well, you will be allowed to leave directly after the procedure. 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. If your liver is being biopsied, then there is a risk of bleeding from the liver, though



this is generally very slight. If the bleeding were to continue, then it is possible that you might need a blood transfusion.

Extremely rarely, an operation or another radiological procedure is required to stop the bleeding.

If you are having a lung biopsy performed, then it is possible that air can get into the space around the lung. This generally does not cause any real problem, but if it causes the lung to collapse, then the air will need to be drained, either with a needle or a small tube, inserted into the skin.

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 doing 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.

Some of your questions should have been answered herein, however 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.