

## Patient information

### Percutaneous Biopsy

#### Interventional Radiology Department

#### Percutaneous Biopsy

This leaflet tells you about the procedure known as percutaneous biopsy, 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.

If you are having the biopsy done as a pre-planned procedure, then you should have plenty of time to discuss the situation with your consultant and the Interventional Radiologist who will be doing the biopsy, and perhaps even your own family doctor (GP).

**If you need the biopsy done as a relative emergency, and then there may be less time for discussion, but none the less you should have had sufficient explanation before you sign the consent form.**

#### What is 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 a pathologist can examine it under a microscope, an expert in making diagnoses from tissue samples. Because this biopsy is done through the skin, it is called a percutaneous biopsy.

#### Why do I need it?

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.

#### What are the benefits of having percutaneous biopsy?

This procedure avoids an operation to obtain a tissue sample

#### What are the risks of having percutaneous biopsy?

- 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. Very, very 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 else with a small tube, put in through 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.

## **Important**

**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 scanning, then you must also tell your doctor about this.**

## **Will I be given an anaesthetic?**

You will be given a local anaesthetic. Local anaesthetic is drug-induced numbness: it may be provided by an anaesthetist, surgeon or other healthcare professional, depending on the technique used.

Like all medicines, local anaesthetics may sometimes cause side effects, as well as the effects that are needed. You may experience dizziness, blurred vision, drowsiness and occasionally loss of consciousness.

Serious side effects are rare, and include fits, low blood pressure, slowed breathing and changes in heartbeat, which may be life-threatening. If you have any concerns about any of these effects, you should discuss them with your doctor

The risks of anaesthesia and surgery are lower for those who are undergoing minor surgery, and who are young, fit, active and well.

**If you are worried about any of these risks, please speak to your Consultant or a member of their team before you are due to have this treatment.**

## **Getting ready for your percutaneous biopsy**

- You may need to be an inpatient in the hospital, although many biopsies can be performed as an outpatient.
- You will probably have had some blood tests performed beforehand, to check that you do not have an increased risk of bleeding.
- 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.

## **The procedure**

The procedure will take place in the Interventional Radiology Theatres, located within the Main Theatre complex, in a special "screening" room that has been adapted for specialised procedures. Occasionally biopsies are performed using an ordinary X-ray machine.

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 Interventional Radiologist can give you a sedative or painkillers.

The Interventional Radiologist will keep everything sterile, and will wear a theatre gown and operating gloves. Your skin will be cleaned with antiseptic, and then most of the rest of your body covered with a theatre towel. The Interventional Radiologist will use the ultrasound machine or the CT scanner to decide on the most suitable point for inserting the biopsy needle. Then your skin will be anaesthetised with local anaesthetic, 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.

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 IR Theatres for about an hour altogether.

### **After the examination**

After the procedure you will be taken to theatre recovery or the Theatre Admissions Unit (TAU) for a few hours. Nurses here will carry out routine observations, such as taking your pulse and blood pressure to make sure that there are no problems. You will generally stay in bed for a few hours, until you have recovered. If you have had a lung biopsy, then you will almost certainly have a chest X-ray performed at some stage.

All being well, you will be allowed home either on the same day, or perhaps the next.

### **Results**

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.

The test results will be forwarded to your doctor who referred you for this test. This is usually within two weeks.

### **Feedback**

Your feedback is important to us and helps us influence care in the future

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

## Further Information

### Special Techniques Department

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