Percutaneous ultrasound guided needle biopsy
Information for patients

Diagnostic Imaging Department
X Ray and Scanning

Specialist Support
If you require this leaflet in another language, large print or another format, please contact the Health Information Centre Tel: (023) 9228 6757, who will advise you.
What is a percutaneous needle biopsy?
A biopsy is a tiny sample of tissue which is sent to the laboratory to be examined. A needle biopsy is a way of taking a small piece of tissue out of your body, using only a tiny cut, so that it can be looked at under a microscope by a pathologist who is 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 a biopsy?
You may already have had other tests such as ultrasound or a CT scan which 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, so the simplest way of finding out is by taking a tiny piece of it away for a pathologist to examine.

What if I cannot attend for my appointment?
If your appointment is not convenient please contact the Radiology Day Case Unit on 02392 286000 ext: 6821 (Mon-Fri 08.30-17.00) as soon as possible so that a more appropriate time can be arranged. This telephone number may also be used for queries about the test.

Do I need to do anything to prepare for the biopsy?
• You will be contacted by telephone a week or two before the biopsy to find out about your health and any medications you take.
• In particular it is important we know about any medications you take to thin the blood. These include aspirin, clopidogrel, warfarin, heparin, rivaroxaban and low molecular weight heparins such as clexane and enoxaparin, but there are also others. You will be told at what point to stop taking these medications before the biopsy, and when you should start them again afterwards.
• This conversation is a good opportunity to ask any questions you may have.
• You will also need to have had a recent blood test - if you have not already had one this will be organised for you.

• On the day of the biopsy you should have a light breakfast before 7am.

Please note it is a good idea to bring a small overnight bag, all your medications and something to read with you as a small number (less than 1%) of patients need to stay overnight in hospital after their procedure.

**Can I bring a relative or friend?**
Yes, but they may not be able to be with you during the actual biopsy.

**Where should I come for the biopsy?**
Please come to:
Queen Alexandra Hospital, Radiology Day Case Unit, Level C.

On arrival in the department please report to Reception and you will be directed to the nursing station. You will be asked a few questions by the nursing staff and you will have your blood pressure and pulse checked. You may also be asked to undress and put on a hospital gown.

**Who will I meet?**
The biopsy will be performed by a radiologist, a doctor specialising in diagnostic imaging. 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. You will also be cared for by a radiographic department assistant and the radiology nursing staff.
Who will explain the biopsy procedure to me? Will I have an opportunity to ask questions?

- Before the procedure starts the radiologist will explain to you what is going to happen and will answer any questions you may have. He or she will also tell you about the risks of the procedure.
- You will be asked to sign a consent form agreeing to have the biopsy.

Please see below for information about how the biopsy is performed, what happens afterwards, the risks of the procedure and general information about consent.

How is a biopsy taken?

- You will be asked to lie on the ultrasound bed in the position that the radiologist has decided is most suitable.
- To start with, the site for the biopsy is found using an ultrasound scanner. Ultrasound uses high frequency sound waves to map out your internal organs. It involves placing a probe and some gel on the skin. It does not hurt and is safe.
- When the correct area has been identified the skin is cleaned and then made numb with a small injection of local anaesthetic.
- A tiny nick is made in the skin through which a small needle is passed. The ultrasound machine is again used to make sure the needle is placed in the best position for the biopsy. As the sample is taken you will hear a loud ‘click’. The sample is put in a pot and sent away to be examined.
- Often more than one biopsy is taken but this is usually through the same nick in the skin.
- The whole procedure usually takes 20-30 minutes but sometimes can take a little longer.
Will it hurt?
The local anaesthetic injection into the skin may sting but quickly goes numb. When the biopsy needle is inserted you may still feel a pushing and pulling sensation but not a sharp sensation from the needle. If the procedure is uncomfortable please let the doctor know as more local anaesthetic may be able to be used.

What happens after the biopsy?

• After the biopsy you will have a small dressing placed over the nick in the skin and you will return to the nursing station either on a bed or in a chair. You may need to lie on your back so let us know if this is difficult.

• Your blood pressure and pulse will be taken at regular intervals, usually for about 2 hours after the procedure, to make sure you feel well and that there have been no complications.

• If you have been taking medications to thin the blood but have stopped them for the procedure then it is important you do not leave the hospital until you have received instructions as to how and when to restart your medication.

• You must have a relation or friend collect you from hospital to take you home and stay with you overnight.

What should I do when I am at home?

• You should rest for the remainder of the day and possibly for the next day, depending on how soon you recover.

• The area from which the biopsy was taken may feel bruised. If this is the case you can take your normal painkiller tablets which should ease the pain. However, you must not take aspirin for 24 hours following your procedure as it increases bleeding.

• Do not remove or make the dressing wet for the first 24 hours. If the dressing is heavily soiled you may use an Elastoplast/Bandaid instead.
• Bleeding from the biopsy site is rare but if there is any, press firmly on the wound site for about 10 – 20 minutes and it should stop.

• If you are at all worried about the biopsy site or feel generally unwell please contact your GP or nearest Emergency department.

• You must not fly by air for 48 hours after your biopsy.

**When will I receive the results?**
The result of the biopsy will not be available on the day of the test. The pathologist will need time to prepare and examine the specimen and your consultant will make arrangements to discuss the result of the biopsy with you.

**Are there any risks from having the biopsy?**
Complications as a result of biopsy are rare.

• The main risk is bleeding which is why it is important you follow our guidance regarding medicines which thin your blood. A major complication as a result of bleeding is exceptionally rare.

• Ultrasound is used to show where the biopsy needle is going but there is still a very small risk of damaging structures next to the intended biopsy site, for example a blood vessel. This is rare but is one of the reasons we monitor you for 2 hours after the procedure.

• Unfortunately, not all biopsies are successful. This may be because, despite taking every possible care, the sample taken is normal tissue. Alternatively, although abnormal tissue has been obtained, it may not be enough for the pathologist to make a definite diagnosis. In this situation we may recommend that the procedure is repeated.

• The procedure will be fully explained by the radiologist on the day, including any potential complications, and there will be a chance for questions.
Consent – What does this mean?
Before any doctor, nurse or therapist examines you they must have your consent or permission. Consent ranges from allowing a doctor to take your blood pressure, (rolling up your sleeve and presenting your arm is implied consent), to signing a form to say you agree to the treatment or operation. It is important before giving permission that you understand what you are agreeing to. If you do not understand please ask. More detailed information is available on request.

How to comment on your treatment
We aim to provide the best possible service and staff will be happy to answer your questions. However, if you have any concerns you can also contact the Patient Experience Service on 0800 917 6039 or E-mail PALS@porthosp.nhs.uk

Information we hold about you and your rights under the Data Protection Act
Please refer to the booklet ‘Your Healthcare Information – Your Rights! Our Responsibilities! for further guidance.

Author: Diagnostic Imaging
Produced: May 2012
Review: May 2015
Ref: Diag/21
Medical Illustration ref: 12/2405
© Portsmouth Hospitals NHS Trust