Having a bone biopsy in the interventional radiology department

This information sheet has been given to you to help answer some of the questions you may have about having a bone biopsy. If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is a bone biopsy?
A bone biopsy is a procedure in which a small sample of bone is taken from the body and examined under a microscope for an underlying bone disorder. The sample of bone is removed by inserting a needle through the skin and directly into the bone. A numbing medicine (local anesthetic) is used to prevent pain during this procedure. Pain relief and a sedative medicine may also be given to help prevent any discomfort.

A bone biopsy is often done on bone areas that show problems on an x-ray. A CT (Computed tomography) scan or an x-ray is used to guide the biopsy needle.

What are the benefits of having a bone biopsy?
Having a biopsy will help your doctor to make a correct diagnosis so that you can get suitable treatment.

What are the risks of having a bone biopsy?
Problems from a bone biopsy are rare, but the following can occur:

- There may be bruising around the biopsy area due to bleeding into the skin. This should not be painful and will heal.
- There is a very small chance of a skin infection or that the bone will become infected (osteomyelitis) or will not heal well. In rare cases, the bone may become weak and break (fracture) at a later time.
- There is a small risk of internal bleeding after the biopsy. If you take aspirin or warfarin, or if you have a bleeding disorder, you may be more likely to experience bleeding from the biopsy site. Also, some tumors or bone conditions can cause greater amounts of bleeding after a biopsy. This is why you will need to stay in hospital for four to five hours after the procedure, so that we can monitor you.
- There is a very small chance that the biopsy needle may break (fracture) the bone or injure a nerve, blood vessel, or organ near the biopsy site. Surgery may be needed to treat this problem, if it occurs.
**Are there any alternatives?**
No. A bone biopsy is the only way for your doctor to get the information needed to make a correct diagnosis and treat your illness.

**Who will be performing the biopsy?**
A specially trained doctor called an interventional radiologist will perform the biopsy. The radiologist will use x-ray and scanning equipment to place the biopsy needle accurately into the bone.

**Giving my consent (permission)**
The staff caring for you will ask your permission to perform the procedure. You will be asked to sign a consent form that says you have agreed to the procedure and that you understand the benefits, risks and alternatives. If there is anything you don’t understand or if you need more time to think about it, please tell the staff caring for you.

Remember, it is your decision. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind. Your wishes will be respected at all times. If you would like to read our consent policy, please tell a member of staff.

**How can I prepare for the procedure?**
In most cases you can come into hospital, have a bone biopsy and go home the same day. You will need to arrange for an adult to take you home by car or taxi.

- You will need to have a blood test about one week before the bone biopsy to check that your blood clotting is normal. This test is necessary as there is increased risk of bleeding after a procedure if your clotting tests are abnormal. Your doctor or clinical nurse specialist will tell you about this test and how to arrange it when they recommend the bone biopsy.
- Please let us know if you are taking any antiplatelet medicines (for example, aspirin, clopidogrel) or any medicines that thin the blood (for example, warfarin), as these may need to be withheld temporarily before the procedure. Call the interventional radiology department for advice as soon as you get your appointment letter. Call 020 7188 5573 (for Guy’s Hospital) or 020 7188 5477 (for St Thomas’ Hospital).
- Let your doctor know about any medicines you are taking. Take your other medicines as normal, unless your doctor or nurse tells you not to.
- Do not eat or drink anything (except water) for six hours before the procedure. You can drink water up to two hours before the procedure.

If you are having the biopsy while you are staying in hospital, your nurse will help you to prepare.
What happens before the bone biopsy?
Please arrive 30 minutes before your appointment time. After you have arrived at the interventional radiology department, you will be checked by a radiology nurse and given a hospital gown to wear. A small plastic tube (cannula) will be put into your arm. This means that we can give you a sedative during the procedure, if you need it.

You will be given the opportunity to ask the interventional radiologist any questions you have. You will need to sign a consent form before the biopsy can take place.

What happens during the bone biopsy?
The procedure is done under x-ray or CT (computed tomography) guidance. This allows the radiologist to see detailed images of the inside of your body. You will be awake during the procedure.

Your skin will be cleaned with an antiseptic solution, and draped with sterile towels. Local anaesthetic is injected around the area from where the biopsy will be taken. This numbs the area, so you should not feel any pain. You will also be given sedation.

During the biopsy, you will be asked to lie on an examining table or firm bed. It is important to lie very still during the entire procedure. Tell your doctor if you need to move or get more comfortable. You may feel some pressure or discomfort during the procedure.

The radiologist will insert a long, thin needle through the skin and into the bone. Your doctor may make a small cut in your skin before putting the needle in so that the needle passes easily. Then your doctor will then take out a small amount of bone, which will be sent to the laboratory for microscopic examination. The wound site will then be cleaned and a dressing put over it.

Will I feel any pain?
The examination should be pain free, though occasionally when a biopsy is being taken it may hurt. You may feel pressure or a brief, sharp pain as the needle enters the bone. You may also feel an aching pain or pressure when the bone tissue sample is taken out.

After the procedure, the biopsy site may be sore and tender for up to a week. Your doctor will talk to you about pain medicine to relieve this.

The position in which you will be asked to lie during the biopsy may also be uncomfortable for a short period. If you feel any pain during the procedure, please tell the nurse and pain relief can be given to you.

What happens after the bone biopsy?
After the biopsy you will stay in the recovery unit. You will need to stay in bed for four to five hours, or as instructed by the nurse. You will be asked to lie on your side or on your back for two to three of these hours to help the healing process. Your blood pressure, pulse and temperature will be checked at regular intervals to spot any problems.
We will provide light refreshment, such as tea or coffee, a sandwich and some fruit. If you have any special dietary requirements, you may wish to bring some food and drink with you.

The nurse will tell you when you can get up and move around.

If you had the biopsy as a day case patient, you will be able to go home. You will need a responsible adult to take you home by car or taxi. We do not recommend that you use public transport as it is unsafe if you feel unwell.

If you are staying in the hospital and there are no problems, you will be taken back to your ward after about half an hour.

**When will I receive the results?**

The results will take about seven to ten working days. You will need to make an appointment to see the doctor that referred you in order to pick up your results. If your referring doctor is based at Guy’s and St Thomas’, you can make an appointment before you leave the hospital.

**If I am a day patient, what do I need to do after I go home?**

You should rest for the remainder of the day and possibly for the next day, depending on your recovery.

- Have someone to stay with you overnight.
- Eat and drink normally.
- Take your usual pain relief, as prescribed, if you have any pain.
- Continue with your normal medication as prescribed.
- Keep a regular check on the biopsy site.
- Shower no sooner than 24 hours after the procedure, and bath no sooner than 48 hours after the procedure.

Please rest at home for a minimum of 24 hours. Do not go to work or school on the day after the procedure. Always follow the advice and instructions that the doctors and nurses have given you.

**What if I have a problem at home?**

Please contact the interventional radiology department on **020 7188 5573** at Guy’s or **020 7188 5477** at St Thomas’, Monday to Friday, 9am to 5pm, if you need advice.

You may notice some bruising at the puncture site. Bleeding or swelling is rare, but if it does happen, lie down and **apply pressure** directly on the site for ten minutes. If the bleeding or swelling continues after ten minutes **go to your nearest accident and emergency (A&E) department taking this sheet with you**.

If you feel you need urgent medical attention or are worried about anything outside of our normal opening hours, please contact your GP, NHS Direct/111 or go to your nearest accident and emergency (A&E) department.
Further information

Contact us
If you have any questions or concerns, please contact the interventional radiology department on 020 7188 5573 at Guy’s or 020 7188 5477 at St Thomas’, Monday to Friday, 9am to 5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)
To make comments or raise concerns about the Trust’s services, please contact PALS. Ask a member of staff to direct you to the PALS office or:
t: 020 7188 8801 at St Thomas’
t: 020 7188 8803 at Guy’s
e: pals@gstt.nhs.uk

Language support services
If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.
t: 020 7188 8815  
fax: 020 7188 5953

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
w: www.nhs.uk

Some of the content in this leaflet has been taken, with permission, from the British Society of Interventional Radiology Leaflet, Percutaneous biopsy (Feb 2011)