Bone Marrow Aspiration and Biopsy Information for Patients and Carers

It has been recommended that you have an investigation done to assess the functioning of your bone marrow. This booklet has been written to give some general information about Bone Marrow Aspiration and Biopsy.

Your appointment has been booked to be done in the O'Connor Haematology Day Unit at Royal Shrewsbury hospital.

Time:	 	 	
Date [.]			

Q. What is Bone Marrow?

Bone marrow is the cellular material within the centre of the bones which acts like a factory to make all the cells of the blood. In this test, a small amount of the bone marrow is removed to be looked at under the microscope in the laboratory.

Q. How is the bone marrow taken?

The bone marrow sample is taken by a doctor or a specially trained nurse.

The samples are generally taken from a prominent easily felt bone area at the back of the pelvis or the breastbone.

These are large, strong bones, which are most comfortable sites for the test.

When the bone marrow sample is taken from the pelvis, you will be asked to lie on your side. A nurse or doctor is present throughout the procedure to explain the process.



Image source: Macmillan Cancer support

The skin area over the pelvis is cleaned, sterile drapes are applied, and then local anaesthetic is injected to numb the skin and surface of the bone.

Once numb, a needle is passed into the spongy area of the bone and 1-2 mls of cells are taken this is called 'aspiration'.

This needle is then removed.

In some cases, it is necessary to take a fine core of the bone, using a different needle which is called 'biopsy'. The same anaesthetised site is used.

Q. What happens then?

After the procedure has been completed, pressure will be applied to the area for several minutes and the site covered with a dressing. You will be asked to lie on your back for 5 minutes.

Some people may experience slight oozing or bleeding from the biopsy site. If you find your dressing has been marked heavily, you should contact the O'Connor Haematology Day Unit on 01743 261057, or Ward 23 Oncology/Haematology on 01743 261423 if out of office hours for advice.

Please inform staff if you are taking any 'blood thinning' medication before the procedure e.g. Warfarin/ heparin. You may have to stop this medication before the procedure.

Q. Can I drive?

It is not recommended that you drive in case you have some discomfort with the procedure.

Q. How long does it take?

The procedure takes about half an hour, but most of the time is getting you comfortable and waiting for the local anaesthetic to work.

You can go home once the procedure is done – people do not usually need to stay in hospital.

Q. Will it hurt?

When the local anaesthetic is given to the area, you can feel a stinging sensation initially before the anaesthetics starts to work. When the sample of bone marrow is taken, you may feel some pushing and sometimes a pain down your leg. This is over very quickly.

You may take mild painkillers in the evening following the procedure, but significant discomfort is unusual.

Q. What are the side effects?

The side effects vary depending on the drugs you are given. You should not experience any side effects from the local anaesthetic – please inform staff if you know you are allergic to any medication before the procedure.

Q. What if I refuse to have this done?

You can refuse to have the procedure done, but this could affect staging investigations and a full assessment of your condition and its management. Please discuss this in more detail with the doctor or nurse.

Q. Where is the procedure done?

The procedure is done at the O'Connor Haematology Day Unit

If you feel you need further information or wish to discuss any further points, please contact us on:

O'Connor Haematology Day Unit: 01743 261057