Clinical Haematology Department

Having a Bone Marrow Test

Information for patients
You may find this leaflet helpful if you or someone close to you is going to have a bone marrow test.

It explains:
• what bone marrow is
• what a bone marrow test is and why you might need one
• what a bone marrow test involves.

What is bone marrow?
Bone marrow is a sponge-like material found inside certain bones of the body. Blood cells are made in the bone marrow. Blood is made up of three main types of cells: red blood cells, white blood cells and platelets. Disorders affecting any of these cell types can be assessed by examining a sample of the bone marrow.

What is a bone marrow test?
In a bone marrow test a sample of bone marrow is taken from inside the bone. This is usually taken from the back of the hip bone, as there is plentiful bone marrow here and it is usually easy to reach. The sample can then be examined under a microscope in a laboratory.

Why do I need a bone marrow test?
Some of your symptoms or abnormalities on your blood tests suggest that there might be a problem with the way your blood cells are made. A bone marrow test is the best way of investigating this to help the doctors to find a diagnosis.
How is the bone marrow test done?

The doctor or nurse will discuss the procedure with you, give you an opportunity to ask questions and ask you to sign a consent form.

You will be asked to lie on your side with your knees bent up and your clothing loosened to expose the top of your hipbone. Your skin will be cleaned with an antiseptic solution. Local anaesthetic will then be injected into the skin over the back of the hip bone to numb the area where the sample is to be taken.

Once the area is numb, a needle will be passed through the skin into the bone and a sample of liquid marrow will be drawn up into the syringe. This is called a bone marrow aspirate. Sometimes a second needle is used to take another sample of the more solid bone marrow tissue: this is called a bone marrow trephine or biopsy.

After the test the nurse will place a small dressing over the site. You may shower or bathe and remove the dressing after 24 hours.

Does it hurt?

The local anaesthetic causes a mild stinging sensation before the skin starts to feel numb. Some patients report a brief sharp pain as the bone marrow is drawn into the syringe, and a dull ache if a trephine biopsy is taken. As the local anaesthetic wears off after an hour or so, many patients feel a bruised or aching sensation over the site of the biopsy, but this is usually relieved by taking paracetamol.
Are there any risks?

It is exceedingly rare for a bone marrow test to be complicated. As with any procedure involving a tissue biopsy, there is a small risk of bleeding from the puncture site: if you are taking medications to thin your blood (e.g. warfarin, aspirin) it is important to discuss this with your doctor before attending for the bone marrow test.

There is also a small risk that the needle puncture site could become infected after the procedure. We take extreme care to keep the procedure sterile to minimize this risk.

Please note that there are additional risks if you choose to be sedated for the procedure. These are described in a separate information sheet and must be discussed with your doctor well in advance of the procedure.

Medication

It is important to tell the nurse or doctor about any tablets or injections you are taking, as they may have to be stopped for a short while before having the test. This is especially important for medications that thin your blood, including warfarin.

How long does it take?

It usually takes about 10-15 minutes to take the sample.

Where is it done?

The test can be done in the Day Treatment Unit.
When will I get the results?

It will take approximately two working days to get the bone marrow aspirate result. A trephine result takes considerably longer (a minimum of ten days) due to the nature of the tests which are done on this sample. We realize that it is a stressful time waiting for results, so your doctor will let you know as soon as possible.

Research

You may be asked if some of your marrow sample can be used for research. If you agree you will be asked to sign another consent form. Your doctor will be happy to answer any questions about this.
How to contact us

If you wish to speak to a nurse or doctor please telephone:

**Haematology Day Clinic**
Tel: 01865 235577
Monday to Friday 8am - 6pm

If you have a problem outside of these hours please telephone the Haematology ward on:

Tel: **01865 235048** or **235049**
If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473 or email PALSJR@orh.nhs.uk

Reference PI.5
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