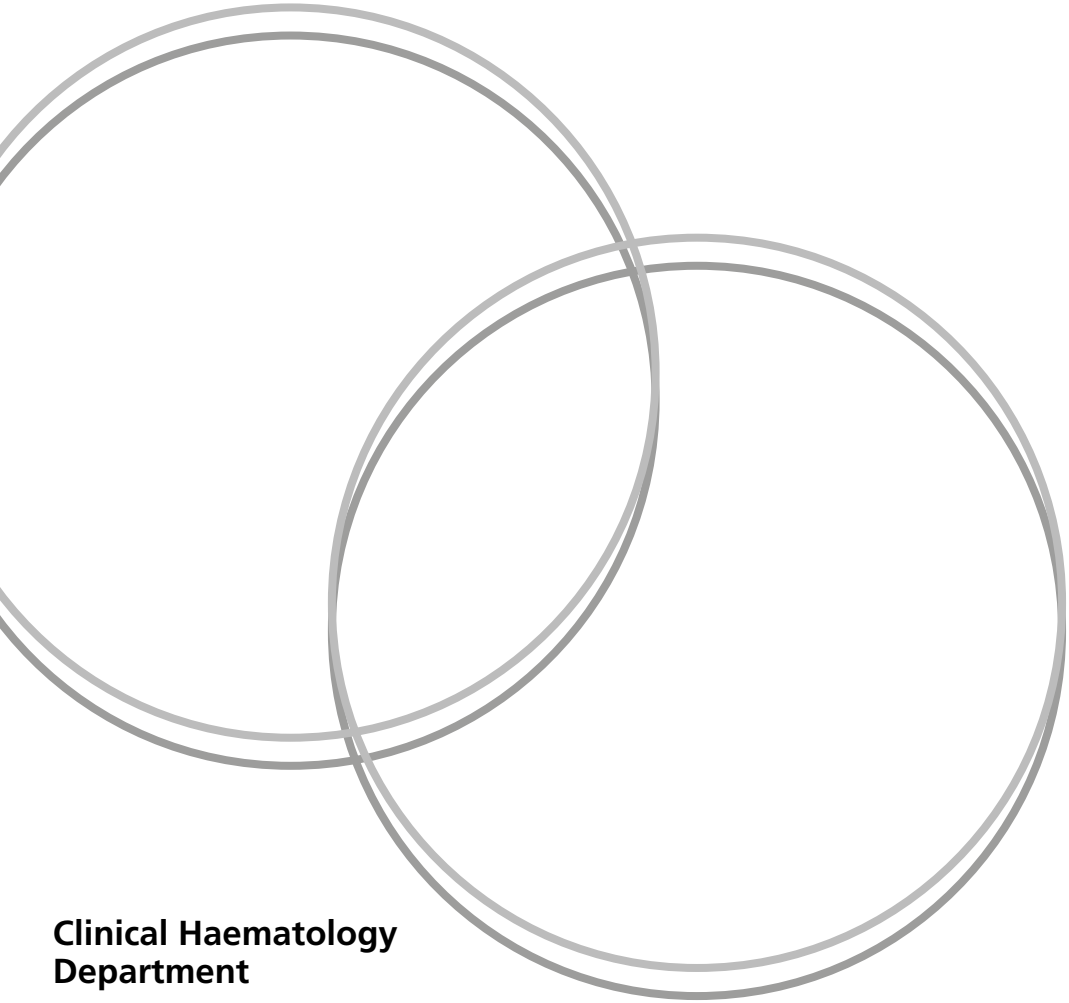
Oxford University Hospitals
NHS Foundation Trust

Having a bone marrow test

Information for patients



Clinical Haematology Department

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 pelvic bone as there is a good supply of 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 provides different information to a blood test. It provides important information about your condition. It might also help to decide on the best treatment for your condition.

Ask your doctor or clinical nurse specialist if you have any questions about the reasons for your bone marrow biopsy.

How is the bone marrow test done?

The doctor or nurse will discuss the procedure with you. This will give you an opportunity to ask questions. You will be asked 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 your back at the top of your pelvic bone. Your skin will be cleaned with an antiseptic solution. Local anaesthetic will then be injected into the skin over the back of the pelvic 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.

A small dressing will be placed over the site. Please wait 24 hours before removing the dressing or bathing the area.

You will be asked to rest for around half an hour and have refreshments after the test is finished. The nurse will check your dressing and explain how to care for yourself after the test. You will then be able to go home.

Does it hurt?

We aim to make the procedure as pain free as possible.

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. This pain does not last for more than a few seconds.

If you have a bone marrow trephine, there may be a dull ache afterwards.

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. This is usually relieved by taking paracetamol.

Can I have pain relief?

You can ask to have "gas and air" during the procedure. This is also called 'Entonox'. Entonox is a pain-relieving gas that you breathe in through a hand-held mouthpiece. It is safe, and it wears off quickly.

You can practise using the Entonox before the procedure. You will be in control of the Entonox during the procedure. Speak to the nurse or doctor if you have any questions about Entonox.

Ask us if you would like more information about pain relief during or after the procedure. You can telephone us on the number at the end of this leaflet.

Will I be able to drive home?

You will be able to drive yourself home. You can also drive home if you have had Entonox. You may prefer to bring someone to be with you on the day and drive you home.

You will be advised to avoid any strenuous exercise for a day or so after the procedure.

Do I need to bring someone with me?

It is not necessary to bring someone with you. However, some people find it reassuring to have another person with them.

Are there any risks?

As with any procedure involving a tissue biopsy, there is a small risk of bleeding from the puncture site.

There may be an increased risk of bleeding if you are taking medications to thin your blood. If you are on aspirin, warfarin, clopidogrel, apixaban or any other blood thinners, please call us as soon as possible on the number at the end of this leaflet. We can discuss whether your medicine should be stopped temporarily in the week before 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.

Sometimes we will not be able to take a sample. If this happens, the procedure might need to be repeated. We will ask your permission to repeat 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.

You should allow up to one and a half hours for the procedure. This is because we need to allow time for you to sign a consent form beforehand. We will also ask you to stay for 30 minutes after the procedure to make sure you feel well enough to go home. This also gives the nurse time to check your dressing and give you advice about how to care for the wound and what happens next.

The procedure might take longer if we need to check your blood count. Telephone us on the number at the end of this leaflet if you have questions about this.

Where is it done?

The test is done in the Bone Marrow Biopsy room on Level 1 of the Churchill Cancer and Haematology Centre in the Haematology Ward.

Directions: From level 1 of the hospital, follow signs to the Haematology Ward. At the ward, turn left through the door labelled Bone Marrow Biopsy Entrance. Please wait in the Day Room to your left. The door will be closed, but please open it and make yourself comfortable.

A nurse will call you through to the Bone Marrow Biopsy room.

When will I get the results?

This will depend on what sort of test you have.

Bone marrow aspirate results may be available approximately two days after the procedure.

Bone marrow trephine results can take longer. It might take more than ten days for these results to be available.

You will usually be given the results of the test at your next appointment. 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 change your appointment or to inform us that you are taking blood thinners, please telephone:

Bone Marrow Biopsy Room

Tel: **01865 235 052**
(9am to 5pm, Monday to Friday)

This number has an answering machine out of hours. We will get back to you within one working day.

If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.

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