

PATIENT INFORMATION**BONE MARROW SAMPLING**

Haematology Department

Investigative procedure information leaflet

It has been recommended that you have a bone marrow sample taken. Your bone marrow is the spongy tissue and fluid which is found inside some of the larger bones in your body, such as your pelvis or chest bone. The bone marrow makes your red blood cells, white blood cells, and platelets.

There are a number of reasons why you will have been advised to have this test. These include;

- To find the cause of abnormal blood counts
- To determine the presence of a disease
- To monitor treatment response.

A bone marrow aspirate involves using a special needle and syringe to remove some of your bone marrow fluid which is then examined in the laboratory.

A bone marrow (trephine) biopsy is when a small core of the bone marrow tissue is removed in one piece. The sample of tissue will be examined under a microscope to look for abnormal cells.

This leaflet explains some of the benefits, risks and alternatives to the operation. We want you to have an informed choice so you can make the right decision. Please ask your medical team about anything you do not fully understand or want to be explained in more detail.

We recommend that you read this leaflet carefully. You and your doctor (or other appropriate health professional) will also need to record that you agree to have the procedure by signing a consent form, which your health professional will give you.

Bone Marrow and Clinical Research

In Worcestershire Acute Hospitals NHS Trust we have a number of haematology clinical trials running at any one time. These are all ethically approved research studies. When you have your bone marrow test done we may ask your permission to store some of the excess tissue or take some extra tissue to be stored for potential research in the future. By taking research samples or storing excess tissue at the time of your diagnostic bone marrow test, it may avoid the need for another bone marrow test if you were offered participation in a trial later on.

You may also be given an information sheet and consent form for the Central England Haemato-oncology Biobank. The Biobank is not included in the type of consent described above and needs Biobank specific consent. The Biobank stores bone marrow and blood samples, consent includes samples previously sent to Birmingham Women's Hospital, as well as any future samples.

Benefits of the procedure

The aim of the procedure is to detect disease and monitor progress of your treatment.

Serious or frequent risks

Everything we do in life has risks. A bone marrow procedure is considered to be safe, but occasionally there can be side effects and complications. These can include:

- Bleeding
In a small number of cases there is some bleeding from the biopsy site. This usually stops by itself. Very rarely the bleeding is more severe and may require a blood transfusion.
- Infection
There is a very small risk that the small wound will become infected.
- Damage to nearby structures
Rarely the needle damages other nearby structures (for example, nerves and muscles).

You will be cared for by a skilled team of doctors, nurses and other healthcare workers who are involved in this type of procedure every day. If problems arise, we will be able to assess them and deal with them appropriately.

Other procedures that are available

At present there are no other alternatives to this recommended procedure.

Preparation before your procedure

You may need a blood test shortly before the bone marrow procedure to check how well your blood will clot. This is to make sure that you are not likely to bleed too much from the biopsy site.

Tell your doctor or nurse if you have previously had an allergic reaction to any local anaesthetics. You may continue to eat and drink as normal before your procedure.

Your normal medicines

Continue to take your normal medicines up to and including the day of your procedure. If we do not want you to take your normal medication, your doctor or nurse will explain what you should do. It is important to let us know if you are taking anticoagulant drugs (for example, warfarin, clopidogrel or aspirin).

Your anaesthetic

The procedure is usually carried out using a local anaesthetic - this will numb the area of skin around the biopsy site.

During your investigation

You will usually be asked to lie on a couch on your side in a comfortable position with your knees curled up.

Once the area of skin has been cleaned with antiseptic, local anaesthetic is then injected into a small area of skin and tissues just over the chosen area of bone. The anaesthetic stings a little at first but then makes your skin go numb. The needle used to sample your bone marrow is then inserted and the sample is taken, using a syringe attached to a needle. The needle is then removed. If a bone marrow (trephine) biopsy is required as well, a slightly different type of hollow needle is then inserted into the bone, through the area of anaesthetised skin, which retains a core of marrow inside it when it is removed.

Bone marrow samples are usually taken from the back of the pelvic bone (the bony part that you easily feel just below your waist). Occasionally they are taken from the breast bone.

Once complete the needle is taken out and a plaster is put over the site of needle entry.

You may be offered the opportunity to have the biopsy performed using needles attached to an electric drill. Please discuss this with the nurse or Doctor if you have a preference.

After your investigation

You will be asked to lie down and rest for a short time after the procedure to make sure that there is no excessive bleeding.

You may have some discomfort and bruising over the test site for a few days, which you can ease with painkillers such as paracetamol.

Leaving hospital

Once you get home, it is important to rest quietly for the rest of the day. This is very important if you have had sedation. Sedation lasts longer than you may think it would.

If you have had sedation, for 24 hours after the procedure, you should not:

- be left on your own;
- drive a car;
- sign any legally binding documents;
- take sleeping tablets;
- work at heights – including ladders;
- use machinery; or
- drink alcohol.

The effects of any sedation, anaesthetic and the procedure itself should have worn off by the next day, when most patients are able to start normal activities again.

Contact details

If you have any specific concerns that you feel have not been answered and need explaining, please contact the following.

- Garden Suite, Alexandra Hospital (phone 01527 512092)
- Millbrook Suite, Kidderminster Hospital (phone 01562 513093)
- Clinical Nurse Specialist, Redditch (phone 07771982762)
- Clinical Nurse Specialist, Worcester (phone 01905 760695 or 01905 763333 and ask switchboard to page bleep no 357)
- Laurel 3 (Haematology Inpatient Unit at Worcester) (phone 01905 760568)

Other information

Do not forget advice, encouragement and support from staff is always available.

We have addresses and telephone numbers for support groups, and other useful booklets and information.

The following internet websites contain information that you may find useful.

- www.worcsacute.nhs.uk
Information about Worcestershire Acute Hospitals NHS Trust
- www.macmillan.org.uk
Booklets on specific cancers and practical guides to living with cancer
- www.patient.co.uk
Information fact sheets on health and disease.
- www.nhsdirect.nhs.uk
On-line Health Encyclopaedia and Best Treatments Website.

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.