Caring at its best

Your bone marrow test

Cancer Services and Clinical Haematology

Information for patients

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Why do I need a bone marrow test?

This test involves looking at the bone marrow to see if there are any abnormal cells and how the normal cells are working.

Do I need to do anything before the test?

You can eat and drink as usual before your test. If you are on warfarin, you will need to stop taking this three days before your bone marrow test. If you are taking dabigatran, rivaroxaban, apixaban or edoxaban you will need to stop taking these for 24 hours before the test.

What does the procedure involve?

You will need to report to the Osborne Treatment Centre, level 2, Osborne Building, Leicester Royal Infirmary.

Date..... Time.....

The whole procedure usually takes about fifteen minutes.

The nurse or doctor will need to expose a small area of the back of your hip called the posterior iliac crest. This is where the bone marrow sample is taken from. You will be asked to lie on a bed, on whichever side is most comfortable for you, with your knees bent towards your chest. Your skin will be numbed with an injection of local anaesthetic. A needle is introduced into the bone cavity, where the bone marrow is made, using a powered driver, and between 1ml and 10mls of fluid are sucked out with a syringe, depending upon the tests required. This can sometimes be painful, but only lasts a few seconds. This is the **bone marrow aspirate**.

Then the nurse or doctor will then go deeper with the same needle to take a small core of the bone. This is the **trephine** and it takes a little longer than the aspirate and can cause nerve pain. Again, this should only last for a few seconds. Afterwards you will be asked to lie flat on your back for a few minutes to stop any bleeding that may occur.

Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk



Will I be offered any pain relief?

Most people will be offered Entonox. However, if you have had a recent head injury or suffer with breathing problems, Entonox may not be right for you. You do not have to have Entonox.

What is Entonox?

Entonox gas is a mixture of nitrous oxide gas and oxygen. It is commonly used to relieve pain during labour and pregnancy, but it can be used as short-term pain relief in other situations, such as bone marrow tests. Entonox is a very safe painkiller, which acts quickly, and is removed from the body very fast, with no long-term side effects.

What are the side effects of Entonox?

Some patients feel light-headed and dizzy. These effects do not last for more than a few minutes.

How do I use Entonox?

You will be given a mouthpiece to hold. When you have any discomfort, breathe deeply from the mouthpiece. This will release the Entonox for you to breathe in. As soon as you longer have any pain, release the mouthpiece and breathe in normal air. Do not worry that you are taking in too much Entonox, as once you release the mouthpiece, the effect of the Entonox will wear off.

Can I drive after having Entonox?

Your body gets rid of the gas very quickly, so it will be safe to drive after 30 minutes.

What are the risks and benefits of the test?

The associated risks are very rare, but occasionally you might get bleeding or infection at the site, or lower back ache. There may also be a small amount of bruising, which will fade in time.

The benefit of this procedure is to obtain an accurate diagnosis. If you have already received treatment, the test can tell us how effective this treatment has been.

How do I find out the results of the test?

You will be given an appointment to come back for the results of your biopsy. Some specialised tests on the bone marrow may take a few weeks to come back but your doctor will discuss your results within an appropriate timeframe according to your diagnosis.

Genetic testing

At times we do genetic test on your bone marrow sample. The need to do this cannot always be predicted ahead of the procedure.

What is genetic testing for cancer?

Your genome contains the information needed to build the human body and keep it healthy. It is written in a chemical code called DNA. Your genome is made up of pieces of DNA, called genes. Cancers are caused by unusual changes to a person's genome. These changes often happen during a person's life. Some changes in the genome can be passed down through your genes. This can mean a person has a bigger risk of having cancer.

What can a genetic test tell you?

The genetic tests we use focus on changes in genes related to your cancer; the tests are not looking for changes in genes that cause other conditions. The test may help you and your healthcare professional understand more about your cancer including the type of cancer and how it might behave in the future. It may guide decisions about treatment and provide information we can use to monitor your progress with treatment.

How will I find out the results of this test?

You will have the opportunity to discuss any genetic test results that have relevance to your health with your Consultant and ask any questions that you may have.

In rare cases we find information that can tell us if you or your family members may be at a higher risk of developing cancer. If we do find this information, we will refer you to the Clinical Genetic Service to discuss your options and how to manage your risk of cancer. This service will also help you think through how to talk to your family members about the results.

What will happen to specimens taken from me?

Once genetic testing is complete, any additional samples remaining are routinely stored at the genetics laboratory so that they can be used for future tests. For example, if a new drug is developed that works if cancer cells show a specific genetic change, then it may be possible to test for this change using the stored sample without the need for an additional procedure.

What will happen to my genetic data?

All data is kept securely and confidentially. Your data is used in line with UK law and NHS policy. More information can be found at www.england.nhs.uk/ contact-us/privacy-notice.

Data use for insurance purposes

Like other test such as a CT scan, any diagnostic genetic findings may need to be disclosed to insurance companies. However, predictive genetic test results, such as those which tell us if you or your family members may be at a higher risk of developing cancer, do not need to be disclosed.

For more information please visit https://www.abi.org.uk/data-and-resources/tools-and-resources/ genetics/

What do I need to do after the test?

Immediately after the procedure there may be a small amount of blood loss. If the bleeding has not stopped after one hour, please contact us on the numbers below.

When the local anaesthetic has worn off you may experience some pain. Please follow the advice given by the doctor or nurse performing the test about what painkillers you can take.

The dressing covering the examination area can be removed the next day. If the site looks red or swollen after two or three days, or is still painful, please contact:

Osborne Treatment Centre 0116 258 5263

Emergency Contact Number 0808 178 2212 (24 hours)

Please remember to attend your follow-up appointment.

Sources of further information

Macmillan Information and Support Centre

Leicester Royal Infirmary

Macmillan Cancor Support	
Website:	www.leicestershospitals.nhs.uk/cancerinfo
Email:	cancerinfo@uhl-tr.nhs.uk
Telephone:	0116 258 6189

Macmillan Cancer Support

Freephone: Website: 0800 808 00 00 www.macmillan.org.uk

Blood Cancer UK

Helpline: Website:

Leukaemia Care

Freephone: Website: 0808 2080 888 www.bloodcancer.org.uk

08088 010 444 www.leukaemiacare.org.uk

اگر آپ کو یہ معلومات کسـی اور زیان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔ علی هذه المعلومات بلغةِ أخری، الرجاء الاتصال علی رقم الهاتف الذي یظهر في الأسفل જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હ્રોચ, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ `ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ। Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

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