

Your bone marrow tests (aspiration and trephine)

Haematology



What is this information about?

This information is about tests (investigations) called 'aspiration' and 'trephine' which are used to find out more about your bone marrow.

It explains:

- why you might need a bone marrow aspiration or trephine
- what bone marrow aspiration and bone marrow trephine are
- where you will have your aspiration or trephine
- what happens when you are having the tests and how long they may take
- what you should do before you have the tests
- how you may feel after you have had the tests
- who you can contact for further information or support.

Why have I been given this information?

You (or a relative or someone who cares for you) have been given this information because your doctor or another healthcare professional has sent (referred) you to have a bone marrow aspiration, trephine, or both.

Reading this information can help to make sure that you know what to expect from these tests and that they go as well as possible.

Why do I need these tests?

Bone marrow aspiration and trephine are done so that we can:

- check that your blood is developing as it should in your bone marrow
- look for any cells in your bone marrow.

There are many different reasons why your doctor may refer you for these tests. They will talk with you and explain the reason why you are having the tests before they arrange for you to have them.

What is a bone marrow aspiration?

This involves taking a sample of bone marrow, usually from the pelvic (hip) bone. **We will:**

- give you a local anaesthetic to numb your skin
- insert a special needle through your skin and bone and into your bone marrow
- use suction through the needle to remove a sample of bone marrow (which looks like blood.)
- The amount of bone marrow that we take is determined by the tests we need to perform. It is usually between 2 and 10mls.

What is a bone marrow trephine?

If you need a trephine, we usually do it at the same time as your aspiration. A different needle is inserted into the same site and takes a small sample of the bone core.

Where does this take place?

Your appointment letter will tell you where you should come for your bone aspiration and the trephine. It will be at a centre which is closer to your home.

Fernhurst Centre at St Richard's Hospital.

Courtyard Ward Level 6 at Royal Sussex County Hospital.

Amberley Ward, North Wing, Worthing Hospital.

How long are a bone marrow aspiration and trephine likely to take?

It usually takes around 20 minutes.

Be aware

if you need to have blood tests or see the doctor or nurse, you should allow up to several hours for your whole visit. If it is your first visit to us, it is likely to take several hours.

Will I feel any pain or discomfort?

A bone marrow aspiration and trephine can cause some pain and discomfort.

You will have a local anaesthetic to numb the area of skin where the needles are put in.

Your nurse or consultant may suggest that you have 'gas and air' (Entonox) while you are having the tests. This can lessen any feelings of discomfort or pain that you may have. It is widely used for short-term pain relief during medical procedures and for people giving birth.

We will tell you how to use the gas and air before we start your aspiration and trephine.

Be aware

- please refer to your appointment letter for instructions about Entonox
- you should wait for at least 30 minutes after you have stopped using gas and air before you drive.

Do not

X drive unless you feel safe doing so.

What should I do before I have my aspiration and trephines?

Do

✓ let us know which medicines you are taking. You may need to stop taking some of them for a time before your aspiration and trephine. This is more likely for any blood thinners (anticoagulants).

You can eat and drink as usual before an aspiration and trephine.

How might I feel after an aspiration and trephine?

The short-term side effects may include some bruising and pain, or discomfort at the site of the tests. This should only last for 3 to 4 days.

If you are in pain, take your usual painkillers, such as paracetamol. Follow the dose instructions on the packet.

Some people may get some bleeding from the site, but this is very rare. It can cause the site to ooze.

If you have these, or other side effects which concern you, please phone your local hospital or your clinical nurse specialist (CNS) for advice.

Do I need time off work after my aspiration and trephine?

Your appointment may start later than the time that you have been given and can take longer if you need any further tests. We advise you to take the whole day off work if you can.

Who can I talk with if I have any questions about the tests?

The doctor who does your aspiration and trephine will be happy to answer any questions you have before or after your procedure.

Who can I contact if I need any further information about my aspirations and trephine or support after I have read this information?

Contact your CNS or your Haematologist's secretary.

UHS Haematology Team contact details:

Royal Sussex County Hospital

Clinical Nurse Specialist 01273 696955 Ext. 63807

Courtyard L6 - Reception 01273 696955 Ext. 67413/63805

Worthing Hospital

Clinical Nurse Specialist 01903 205111 Ext. 84197

Balcombe Ward/Amberley Unit - Reception

01903 205111 Ext. 86326

St Richard's Hospital

Clinical Nurse Specialist 01243 788122 Ext. 33597

Fernhurst Centre - Scheduler

01243 788122 Ext. 35416

Today's research is tomorrow's treatments.
That's why UHSx is proud to be a research-active Trust.

Find out how you can get involved. Visit our website www.uhsussex.nhs.uk/research-and-innovation/information-for-patients-and-public or scan the QR code



This leaflet is intended for patients receiving care in Brighton & Hove, St Richard's Hospital and Worthing Hospital.

Ref. number: 2649

Publication date: 10/2025 Review date: 10/2028

© University Hospitals Sussex NHS Foundation Trust Disclaimer: The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

