

# Bone marrow biopsy

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## Information for patients

This leaflet is not meant to replace the information discussed between you and your doctor, but can act as a starting point for such a discussion or as a useful reminder of the key points.

### What is a bone marrow biopsy?

A bone marrow biopsy is an investigation that allows your doctor to assess your bone marrow.

The bone marrow is responsible for the production of blood cells. These are:

- **red blood cells**, which carry oxygen around your body
- **white blood cells**, which fight infection; and
- **platelets** whose job is to help stop bleeding.

### How does a bone marrow biopsy help in diagnosis?

A biopsy can find problems that may be occurring in your marrow, for example either not enough or too many cells are being produced.



## How is a bone marrow biopsy carried out? Will it hurt?

Before your biopsy your doctor will explain what will happen and what the possible risks are. Please use this time to ask any questions or concerns you may have about the procedure.

- You will be asked to lie on your left side with your knees bent (see image below).
- Your skin will be cleaned with a special solution called chloroprep, which will remove any bacteria and reduce the risk of infection.
- You may feel a slight sting when the local anaesthetic is injected, otherwise you should have minimal discomfort.
- A needle will be inserted into your bone and a small amount of marrow will be taken, this is known as an aspirate.
- The next part of the procedure is to take a small piece of bone, this is called the trephine biopsy.
- Once the biopsy has been taken, a small plaster will be placed over your wound site. You will need to leave this on for 24 hours.

## How long will the procedure take?

The procedure will take approximately 30 minutes.

## When will I get the results of my biopsy?

The results of your biopsy will be explained to you by your haematology doctor, typically during your follow-up appointment. Some of the results (when chromosomes and molecular studies are needed) can take up to six to eight weeks to be available to your doctor.



If you have any queries or concerns whilst waiting for your appointment to discuss your results, please contact the Clinical Nurse Specialist's helpline on 01227 86 86 66.

## What are the risks?

The main risk is infection but this risk is minimised by the use of sterile techniques and cleaning of the skin. If your wound site becomes swollen or painful, please contact your GP as you may have an infection.

Other side effects are discomfort and bruising at the site of biopsy.

## What should I do before and during my procedure?

There are no preparations that you need to do before your procedure. Once you are placed in the right position we would ask that you remain as still as possible during your procedure.

You should tell the staff if you have an allergy to local anaesthesia (usually given for dental procedures).

## Are there any alternatives?

No. This procedure is essential to diagnose or to rule out a problem with your bone marrow.

A bone marrow aspiration and trephine biopsy is generally very well tolerated under local anaesthetic. Some patients find the procedure too painful, so we use “gas and air” (Entonox). We do not offer this routinely, as the majority of patients do not need it, but you will be able to discuss this with the doctor performing your procedure.

Very rarely we will arrange for a bone marrow biopsy to be carried out under sedation, but this is only for those patients who cannot tolerate this procedure under local anaesthetic and Entonox. If you have sedation you will need to be admitted to the Day Hospital, where intravenous (into a vein) sedation is given by an anaesthetist. Please discuss this with your doctor, as choosing this approach may result in delays to performing your procedure.

**This leaflet has been produced with and for patients**

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**Any complaints, comments, concerns, or compliments** please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email [ekh-tr.pals@nhs.net](mailto:ekh-tr.pals@nhs.net)

**Patients should not bring in large sums of money or valuables into hospital.** Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

**Further patient leaflets** are available via the East Kent Hospitals web site [www.ekhufft.nhs.uk/patientinformation](http://www.ekhufft.nhs.uk/patientinformation)