

Bone Marrow Biopsy / Trephine

What is a bone marrow biopsy?

A bone marrow test (also called bone marrow trephine) looks at the structure and cells within the bone marrow — where blood cells and some immune system cells are formed. A bone marrow biopsy provides a lot of information about how the bone marrow is working and whether any abnormalities are present.

What does a bone marrow biopsy involve?

A bone marrow biopsy involves using a sharp needle to enter the bone marrow, usually in the hip bone towards the lower end of the back — an area where the bone is close to the skin and easily accessed. A small amount of liquid bone marrow is usually taken and placed onto slides for laboratory examination, and also sent for additional specialised tests. Usually a small piece of solid bone marrow is also taken and examined.

Is the bone marrow test painful?

Having a bone marrow biopsy is sometimes painful. With local anaesthetic given before the needle is inserted, this pain is usually well tolerated. Sometimes a sedative is given (under appropriate hospital conditions) to help manage discomfort. Bone marrow tests can often be performed without sedation in a doctor's surgery.

What are the risks of having a bone marrow biopsy?

When performed by experienced doctors, the risks of a bone marrow biopsy are quite small. Sometimes there can be bleeding at the needle insertion site — pressure applied afterward can reduce this risk. Occasionally infection can occur at the site, though keeping the wound clean afterward also reduces this risk. Sometimes the biopsy site can be painful for a number of days. The approximate risk of one of these complications is about 1 in 1000 (0.12% complication rate across 13,505 bone marrow biopsies).

There are additional risks associated with sedation — discuss these with your doctor.

What do I need to do after having a bone marrow biopsy?

The biopsy site can sometimes be painful for a day or two afterward. Simple painkillers (e.g. paracetamol) should be adequate to control this. You may have a dressing placed over the site — ask your doctor the best way to care for the wound. If you experience increasing pain at the site, contact the doctor who performed the procedure.

If you have sedation at the same time as the biopsy, you will not be able to drive home afterward.

When will the results of the bone marrow be available?

It takes 2 to 3 days for the majority of results to become available. Results are forwarded to the doctor who ordered the procedure. Some tests take longer (e.g. genetic tests performed on bone marrow), and you will need to follow these up with your doctor.

References

1. Bain BJ. Bone marrow biopsy morbidity and mortality: 2002 data. *Clinical & Laboratory Haematology*. 2004;26(5):315-318.

Further Questions?



The information presented in this fact sheet is intended as a general guide only.

Patients should seek further advice and information about **Bone Marrow Biopsy / Trephine** and their individual condition from their treating haematologist or doctor.

For additional information about blood disorders and their treatment, or to contact one of our specialist haematologists, visit the Melbourne Haematology website:

www.melbournehaematology.com.au