

Bone Marrow Biopsy Information

This information sheet has been given to you to help answer some of the questions you may have about having a bone marrow biopsy. If you have any further questions or concerns, please speak to Dr Cecily Forsyth or Jacqui Jagger.

What is a Bone Marrow Biopsy?

Bone marrow is the spongy tissue found in the middle of your bone where your blood cells are made. A bone marrow biopsy allows examination of the bone marrow cells to facilitate accurate diagnosis and planning of treatment and to evaluate the effectiveness of treatment. Bone marrow tissue is usually taken from the large pelvic bone towards the lower end of the back, where the bone is closest to the surface.

There are two parts to the biopsy:

- Bone marrow aspirate – this is when a small amount (1-5 ml, less than a teaspoon) of bone marrow is sucked out through a small hollow needle into a syringe.
- Bone marrow trephine – this is when a small core or piece of the bone marrow is removed using a small hollow needle.

The Procedure

Before the procedure is planned please inform your doctor or nurse practitioner if you are taking anticoagulant drugs (e.g. warfarin, rivaroxaban, apixaban) or antiplatelet medications (e.g aspirin or clopidogrel). These medications will need to be ceased before the biopsy is performed and recommenced once the procedure is over.

If you have any type of sedation (inhaled or oral) it is prohibited to drive or operate machinery for the remainder of the day.

It is advisable to wear loose-fitting, comfortable clothing and have someone to assist you travelling home after the biopsy.

Premedication

Local anaesthesia is used for all patients. It gives good pain cover, and many patients find this sufficient without requiring additional sedation or analgesia. If you have found bone marrow biopsies uncomfortable in the past, we can arrange for your bone marrow biopsy to be performed at Gosford Hospital using inhaled, light acting, pain relief (methoxyflurane/Penthrox, also known as the 'green whistle').

During your Procedure

The procedure usually takes a maximum of 20 minutes. If you require inhaled sedation, you will be allowed to go home around 30 minutes after the procedure has finished.

You will be positioned on your side. Local anaesthesia will be given to numb a small area of the skin and on top of your pelvis bone. A small cut in the skin is made (less than 0.5 cm). A needle is inserted through the cut and a liquid sample (aspirate) is withdrawn and this is used to make slides and perform other specialised tests. A core of tissue (trephine) the size of a matchstick is then removed. The procedure is reasonably quick, but at times can be uncomfortable. Most patients find the discomfort mild and tolerable.

After Your Procedure

It is important to keep the dressing dry for 24-48 hours after the procedure to reduce the risk of infection. It is not uncommon for a small amount of blood to stain the dressing and a dull ache at the site of the biopsy may be present for a few days after the procedure. Paracetamol (e.g. Panadol, Panamax) is usually sufficient for the pain but if there is severe or ongoing pain or heavy bleeding please contact Central Coast Haematology for advice.

After 24 hours you can wash as normal and no further dressing should be needed.

Risks of the Biopsy?

The biopsy is performed by experienced doctors and the risk of a serious complication is very low. Bruising and discomfort over the area are common for up to one week post biopsy.

Bleeding or infection at the biopsy site are rare complications. Pressure at the site of the biopsy will reduce the risk of bleeding and keeping the wound dry for 24-48 hours after the procedure reduces the risk of infections. Please notify your doctor if the site becomes red, hot, or if bleeding persists.

Getting your Results

The results will be available within seven days although some specialised tests (e.g. genetic tests) may take up to four weeks. Please ensure you have an appointment to receive your results and discuss your diagnosis two weeks after the procedure.

