

Bone Marrow Biopsy

What is a bone marrow biopsy?

Bone marrow is the soft tissue and liquid inside bone where the blood stem cells are stored. Blood stem cells turn into red and white blood cells and platelets. These cells are needed throughout your life. During a bone marrow biopsy, a sample of bone marrow is drawn up through a needle and studied under a microscope.

What is the purpose of a bone marrow biopsy?

You may need a bone marrow biopsy if you have an abnormal number of red or white blood cells or platelets. This test tells your doctor how your cells are being formed and the number and type of cells present. It also helps to find blood disorders, some types of anemia, infections, and leukemia. The test can also tell us about the spread of cancer and how well the cancer treatment is working.

What do I need to do to get ready?

- Take your normal medicines on the day of your test. You do not need to stop blood thinners or aspirin.
- Do not eat solids or drink milk for 6 hours before the test. You may drink clear liquids for up to 2 hours before the test, or follow the instructions from your provider.
- You need to have someone drive you home after the test. Wait to drive until the next day.
- Wait to make important decisions until the next day.

How long will the procedure take?

We can collect a marrow sample in less than 10 minutes. We ask you to stay for at least 15 minutes after the biopsy to watch for bleeding. If you were sedated (given medicine in your IV for pain or to help you relax), you must stay 30-60 minutes to recover.

Where will the sample be taken?

In most cases we take the marrow sample from the back hipbone. We can also take it from other areas too. We will ask you to lie face down with your upper hip area exposed.

What will the procedure be like?

First, your doctor will press gently on your skin on top of the bone being sampled. Next, we wash and clean the skin. This may feel cold. We place sterile towels around the area. To decrease pain, your doctor injects a numbing medicine (anesthetic). You will feel a "stick" from the needle, then a burning feeling as the doctor injects the medicine. It takes about a minute to become numb.

Once the area is numb, the doctor makes a small slit into your skin. Next, the doctor will pass a needle through your skin into the bone. Your doctor puts slight force on the needle as it enters the bone. You may feel some pressure. After the needle is in the doctor will attach a syringe. Your doctor pulls fluid into the syringe. This is also known as bone marrow aspiration. You may feel a sharp pain, deep inside your bone. This lasts a few seconds. Your nurse lets you know when the doctor pulls the fluid. Taking deep breaths or using a relaxation technique may help. Ask your nurse if you would like help with this.

Through the same spot, the doctor uses a special needle to cut out a tiny piece of bone, called a core. You may feel pressure and pain as the doctor turns the needle and takes out the core. This is also known as a bone marrow biopsy. The doctor removes the needle with the core and applies a bandage or dressing to the skin.

We will ask you to lie on the biopsy site for at least 15 minutes. We will check the site for bleeding. We will also check your vital signs and watch you if you were sedated.

Is there any special care after the test?

Keep the dressing or bandage dry and in place for 24 hours. As the numbing medicine wears off, you may need medicine for pain.

Take _____ for mild pain.

Bleeding is rare but if you notice some bleeding after going home, hold steady and firm pressure to the site. Call your doctor or nurse if bleeding from the site doesn't stop.

Bleeding into your belly is rare. If your pain gets worse in your lower back, hips, or belly, or you start to feel dizzy or lightheaded, call your doctor right away.

You may resume most activities. Heavy lifting, jogging, or other strenuous activities may make the pain last longer.

When will I know the results?

Your doctor may have some results back within 48-72 hours. Complete results may take 7 days. Please call the clinic if you have not heard from us after 1 week.