Bone Marrow Biopsy Procedure Guide

What Is a Bone Marrow Biopsy?
A bone marrow biopsy is the removal of soft tissue and liquid, called marrow, from inside bone. The bone marrow is where blood stem cells are stored. These stem cells develop into the red and white blood cells and platelets needed throughout life. During a bone marrow biopsy, a sample of bone marrow is withdrawn through a needle for study under a microscope.

What is the purpose of a Bone Marrow Biopsy?
Your doctor may order a bone marrow biopsy if you have an abnormal number of red or white blood cells or platelets. This test provides information about how your cells are being formed and the number and type of cells present. A bone marrow biopsy can help to find blood disorders, some types of anemia, infections, and leukemia. It can also give helpful information about the spread of cancer and response to cancer treatment.

How long will the procedure take?
A marrow sample can be collected in less than 10 minutes. You are asked to stay for at least 15 minutes after the biopsy to watch for bleeding. If you received sedation (medicine in your IV for pain or to help you relax), you must stay 30-60 minutes for recovery.

What do I need to do to get ready?
- Take your normal medicines on the day of your procedure.

There is no need to stop blood thinners or aspirin before your procedure.

Additionally, if you are having a sedated procedure:
- Do not eat solids or drink milk for 6 hours before the procedure. You may drink clear liquids for up to 2 hours before the procedure, or as directed by your provider.
- You need to have someone drive you home after the procedure. Wait to drive until the next day.
- Wait to make important decisions until the next day.

Where will the sample be taken?
The marrow sample is most often taken from the back hipbone. It can be taken from other areas too. You will be asked 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, your doctor washes the skin with a cleaning agent, which may feel cold. Sterile towels are placed 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 medicine enters the area. It takes about a minute for the numbing medicine to take effect.
Once the area is numb, a small slit is made into your skin. Next, a special needle is put 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, a syringe is attached. This is to take out some of the fluid, which contains cells. 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, a special needle cuts out a tiny piece of bone, called a core. You may feel pressure and pain as the needle is turned and the core is obtained. This is also known as a bone marrow biopsy. The needle with the core is removed and a bandage or dressing is applied to the skin.

Afterwards, you will be asked to lie on the biopsy site for at least 15 minutes. The site is checked for bleeding during your recovery. Your vital signs will also be monitored if you received medicines for sedation.

Is there any special care after the procedure?
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.

It is rare for bleeding to happen. If you notice 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 in the biopsy site last longer.

When will I know the results?
Your doctor may have preliminary results back within 48-72 hours, but complete results can take 7 days. Please call clinic if you have not heard from us after 1 week.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911.

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