Bone Marrow Donation

Here is information to help you prepare for your bone marrow donation. This handout will tell you about the bone marrow donation procedure, what to expect after your procedure and how to take care of yourself at home.

Bone marrow is where blood is formed in your body. The marrow is a sponge-like material that fills the inside of your bones. The tiny spaces in the bone marrow hold stem cells that make blood cells. Some of the bone marrow is collected (harvested) and used for a transplant.

Here are the different types of blood and bone marrow transplants:

- A **syngeneic** (sin – jin – a’ – ick) **transplant** is when marrow is collected for your identical twin.
- An **allogeneic** (allo – jin – a’ – ick) **transplant** is when marrow is collected for your family member.
- A **matched unrelated transplant** is when marrow is collected from someone you do not know.

Before your bone marrow donation, you will have an appointment in the outpatient clinic to make sure you are in good health.

**At this appointment, you will:**

- Have different medical tests done to check your overall health. Some of these tests may include:
  - A physical exam and brief health history
  - An electrocardiogram (EKG) to check your heart
  - A chest X-ray
  - A blood test

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

Be given information about how to prepare for your bone marrow donation, including:

- Not to eat or drink anything after midnight the night before your procedure.
- What medicines you will need to stop taking before and after your procedure.

Be asked about any medicine(s) you take, including prescription or over-the-counter medicines, herbs, supplements and vitamins.

### How to Clean Your Skin Before Bone Marrow Donation

You will need to clean your skin with CHG bath cloths the night before and the morning of your procedure. You will be given 2 CHG packages to use to clean your skin. Each package will have 2 CHG bath cloths. Follow the directions below to clean your skin the night before and the morning of your procedure.

**Directions**

1. Shower and towel dry as normal.

2. Open 1 CHG package. Use 1 CHG bath cloth to clean your lower back, from your waist to the bottom of your buttocks.

3. Let your skin air dry for 1 minute.

4. Use the second CHG bath cloth, and clean your lower back, from your waist to the bottom of your buttocks.

5. Let your skin air dry for at least 1 minute. **Do not** rinse your skin. Once your skin is dry, put on clean clothes.

**Do not** rinse or dry your skin with a towel after you use the CHG bath cloths. **Do not** put any body lotion or body products on your skin after you use the CHG bath cloths.
The Day of Your Bone Marrow Donation Procedure

Your bone marrow donation procedure will be done in an operating room. The procedure takes about 1 to 2 hours. Before you go to the operating room, you will be asked to:

- Change into a hospital gown
- Empty your bladder
- Remove all jewelry and hairpins
- Remove any dentures or partial plates
- Remove any make-up or nail polish
- Remove eyeglasses or contacts

An intravenous (IV) catheter is put into a vein in your hand or arm to give you fluids during and after your procedure. This will be done in the pre-operative area before your procedure.

In the operating room, the doctors and nurses will wear head covers, masks, and gowns. This helps keep the procedure area clean, or sterile. The doctors from the Bone Marrow Transplant Program will do your procedure.

The Anesthesiologist will give you medicine to help you sleep during your procedure.

Bone Marrow Donation Procedure

To remove bone marrow, your doctor will put a needle through your skin, into your hip bone. Your stem cells, along with some blood, are removed with this needle. The needle is put through your skin 2 to 3 times on each side of your rear hip bones. There are many bone punctures with each needle stick. After your procedure, a large dressing will be placed over the area to keep it from bleeding.

A total of 1 to 2 liters of bone marrow will be removed during your procedure. A small amount (about 5%) of your stem cells will be collected.

After your bone marrow has been collected, it is filtered to remove fat and bone material. The way the bone marrow is processed is based on the type of transplant:

- **For syngeneic or allogeneic transplant** the marrow is put into a blood transfusion bag. It is then given to your family member through an IV catheter.
- **For a matched unrelated transplant**, the marrow is prepared and then taken to the patient.
After Your Bone Marrow Donation Procedure

Once your procedure is over, you will be taken to the Post Anesthesia Care Unit (PACU), for 4 to 6 hours to recover. The following is a list of what you can expect during that time:

- Your nurse will check your blood pressure and pulse every 15 minutes.
- Your nurse will check the dressing on your hip bones often. It is normal to have some red drainage on your dressing. Unless told otherwise, it is important to leave the dressing on for 48 hours after your procedure.
- Your throat may be dry and sore from the tube that was used to help you breathe during your procedure.
- Your blood cell count may be low and you may need a blood transfusion to replace your red blood cells.
- Your nurse or doctor will tell you when you can eat or drink. You will start with clear fluids first, and then slowly advance to solid foods. It is best to not eat a full meal right away. Tell your nurse if your stomach becomes upset.
- If you have some pain in your hips, tell your nurse so you can be given medicine to help relieve your pain.
- Do not get out of bed by yourself. Ask your nurse to help when you want to get out of bed.
- To help prevent infection in your lungs after your procedure, it is important to:
  - Change your position in bed
  - Take deep breaths
  - Cough every 2 hours

Preparing For Discharge

Unless told otherwise, you will be discharged from the hospital in the late afternoon on the day of your procedure. Before you leave the hospital, your doctor or nurse will give you directions on how to care for your hip dressings and how to manage your pain at home.