

A GUIDE FOR BONE MARROW DONORS

Welcome

You have been referred to the Stem Cell Transplant Clinic as a donor for the harvesting of Bone Marrow.

This booklet has been prepared to answer some common questions and provide you with the general information about the collection of bone marrow

We at the Stem Cell Transplant Clinic want this to be a successful and pleasant experience for you! Although there is a need for a great deal of care to be devoted to the patient for whom you will be donating bone marrow, we are concerned about your health and needs as well.

If you have any questions or concerns regarding this procedure, please don't hesitate to contact a member of the Clinic team:

What is bone marrow?



Bone marrow is the blood that fills the inner part of the bone. It is the place where all the blood cells (red blood cells, white blood cells and platelets) are produced. The bones that have a larger amount of bone marrow are the pelvic bones, the sternum and the femurs.

What is a bone marrow harvest?

A portion of your bone marrow will be collected in the operating room. Before the operation the doctor will put you to sleep using general anesthesia.

What is the preparation?

Once you have been identified as a suitable donor, you will come to the BMT Clinic and undergo blood tests, chest x-ray and a heart test called electrocardiogram. When these have been completed an appointment will be made to see the physician who will take a health history from you and do a physical examination. This is done to ensure that the process of bone marrow donation will not jeopardize your health, nor will the infusion of your blood cells be harmful in any way to your relative. Female donors must not be pregnant and avoid becoming pregnant during the time of donation. Please tell the nurse if you think you may be pregnant.

You will be asked to read and sign consent forms for the bone marrow donation. It is important ask any questions you may have or discuss any worries with the BMT staff.

If you are going for bone marrow harvest on Monday you will come to the BMT Clinic on Sunday, have labs drawn and see the doctor for an assessment, then you will have an appointment in the Pre Anesthesia Clinic who will make sure you are fit to have an anesthesia.

The night before the procedure you should have nothing to eat or drink from midnight, to ensure your stomach is empty before the surgery. This will prevent you from vomiting during the harvest.

On the morning of the procedure, you need to take a shower and change into clean clothes before you come to the hospital. On Monday morning you will go to the Day Surgical Unit (DSU) early in the morning and the staff will prepare you for your procedure. Later that day the doctor will come and see you in the DSU and if everything is ok you will be discharged.

If you are going for a bone marrow harvest on Wednesday, you will come to the BMT Clinic on Tuesday to have a blood test and see the doctor for an assessment. Later that day you will be admitted to the hospital. That night you will need to take a shower and change into hospital clothing. From midnight you should have nothing to eat or drink to prevent you from vomiting during the harvest. The next morning the nurses will prepare you for the procedure and you will be transferred to the Operating Room.

What is to be done on the day of the harvest?

Since you are not eating and drinking you will need an intravenous line starting to give you fluids during the procedure. The intravenous line will start in your hand or arm. After the procedure when you are drinking fluids, the intravenous line will be removed.

On the morning of the harvest, before you go to the operating room, you must:

- Wear only the hospital clothing (no underwear).
- Pass urine.
- Remove all jewellery and hairpins.
- Remove all make-up and nail polish.
- Remove eyeglasses or contact lenses.
- Dental prosthesis.

You will be taken to the operating room on a stretcher accompanied by a nurse. Your relative can go with you to the door of the operating room. In the operating room the doctors and nurses will be wearing gowns and masks. The doctor who will be giving you general anesthesia will be present.

The medicine will be given into your intravenous line. While you are sleeping the doctor will help your breath by placing a tube into your throat.

What is done during the harvest?



Your bone marrow is collected by placing a needle through the skin into the inner part of the pelvic bones. Both the left and the right pelvic bones will be used. The cells that make blood cells are drawn through the needle and then placed in a special bag. The needle will be placed through the skin about two to three times on each side. This procedure takes about one to two hours. After the cells are collected pressure dressings will be placed on the needle sites to prevent bleeding. These dressings will be removed the day after the operation.

What happens after the harvest?

You will be taken from the Operating Room to the Recovery Room where you will stay until you are awake, for about one to two hours. The nurse in the Recovery Room will be taking your blood pressure, temperature and heart rate to make sure you are fine.

From the Recovery Room you will be taken back to either your room if you are staying overnight or the Day Surgical Unit.

The nurses will check your vital signs frequently and the operation site to make sure it is not bleeding. Your throat may be sore from the tube that was placed in during the procedure. Do not drink or eat anything until the nurse says it is ok. When you are drinking well the intravenous line will be discontinued. After a few hours you may eat.

You may have discomfort at the site of the operation. If you have pain tell the nurse. The nurse will give you something to take away the pain. When you are feeling awake properly it is a good idea to get up and walk a little.

When can I go home?

If you are in the DSU the doctor will come in the afternoon to check you over before you go home. You should have an appointment to come back to the nurse clinic the next day.

If you have been admitted, usually you go home the next day. In the morning after the operation, you will have a blood test, and the doctor will visit you to check you over and discharge you. After your shower the nurse will remove the dressings and place small dressings over the site, which can be removed the next day.

If you need work or school excuse, please inform us.

What are the discharge instructions?

- Eat and drink well.
- Check the needle sites daily for signs of swelling, bruising, drainage, redness and tenderness. Report any of these signs to the nurses in the BMT Clinic.
- If you have a temperature or are experiencing chills report this to the BMT Clinic.
- Take warm showers to reduce the discomfort at the needle sites.
- Take the medication prescribed for any pain or discomfort.
- Call us at the BMT Clinic if you are worried about anything.

Follow-up Care

We will give you an appointment one month after the Bone Marrow collection, with blood tests. If before that time you are unwell you can call your BMT coordinator or your physician.

If you have any further questions regarding the harvesting of bone marrow, please feel welcome to ask any member of the BMT staff. All teams are committed to provide you with the best care.

Acknowledgements

Information in this document is reproduced with kind permission of the Bone Marrow Transplant Unit, King Faisal Hospital & Research Centre-Riyadh, Saudi Arabia. The sources below were referenced during the writing of this document:

National Marrow donor Program (NMDP)
World Marrow Donor Association (WMDA)
European Bone Marrow Transplant (EBMT) textbook for nurses