

*“ This chapter is key in helping you
prepare for your transplant.”*

— BMT Survivor

CHAPTER 5



Preparing for Your Transplant

Evaluation Tests for Eligibility, Preadmission

Central Vascular Access Device

Fertility Issues and Reproductive Options

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Preparing for Your Transplant

Evaluation, Tests for Eligibility, Preadmission

If your doctor has determined that you are a candidate for a blood or marrow transplant you will be required to undergo preadmission testing to further determine your eligibility for transplant. Eligibility for transplant requires that you are able to undergo a transplant.

Your doctor will review your medical history and perform a physical examination. Your doctor will review the pros and cons of having a transplant, the purpose of the transplant and the process of the treatment and determine if you are eligible for transplant.

If you are eligible, you will begin a series of additional tests. These tests will help your doctor make a final decision about your eligibility. If an outside doctor has sent you to City of Hope, he/she will be given the results of these tests for your records once they are completed.

Eligibility Testing

Eligibility testing may be done at a facility outside of City of Hope for some patients or at City of Hope for others. Whether or not your testing is done at City of Hope depends on your insurance provider.

All preadmission testing must be done within 30 days of your scheduled transplant. Your nurse coordinator will work with you to coordinate the scheduling of these tests to ensure they are completed within the appropriate timelines.

***If testing falls outside the 30 days before the transplant, these tests may need to be repeated.*

If there are abnormal findings from your eligibility testing, your doctor will review the results with you before proceeding with the transplant. The results of your eligibility testing will also be used as a baseline to measure your progress throughout the time you are in hospital.

Common Preadmission Testing

Blood Tests

Complete Blood Count (CBC)
Blood Chemistry
Infectious Disease Markers

Creatinine Clearance

24-hour urine collection measures kidney function.

Glomerular Filtration Rate (GFR)

The GFR tests how well your kidneys are working.

Chest X-ray	X-ray of the chest views the lungs, heart and surrounding structures for abnormalities.
Electrocardiogram (EKG)	Measures the heart's electrical impulses to evaluate rhythm and function.
Echocardiogram	A diagnostic test that uses ultrasound to see the internal structures of the heart. All cardiac valves can be seen and the size of each ventricle and the left atrium can be measured. It can be used to measure the strength of the heart muscle.
CT Scan	Computerized tomography scan is an X-ray technique that produces images of cross-sections ("slices") through your body. This enables your doctor to view the inside of your body at various angles.
Stress Test	If you are greater than 55 years of age, or the doctor feels that it is required, you will need to have a stress test. An exercise stress test is a screening tool to test the effect of exercise on your heart.
Pulmonary Function Tests	Pulmonary function tests (PFT) are breathing tests to find out how well you move air in and out of your lungs and how well oxygen enters your body.
Bone Marrow Aspiration and Biopsy	This is a procedure to obtain samples of bone marrow for testing of bone marrow function. A needle is inserted into the posterior hipbone after local anesthesia has been given and bone marrow is removed through the needle
Bone Age	Baseline test to estimate potential in the growth plates in the left hand and wrist. Serves to inform pediatric endocrinologist of possible slowing of growth in patient.
Lumbar Puncture	This is a procedure, sometimes called a "spinal tap," and is used to obtain a sample of cerebrospinal fluid for testing. A needle is inserted into your spine in your lower back to obtain the sample.

Skeletal Survey

This is a series of X-rays taken of all the long bones (arms and legs), the spine and the skull to evaluate the presence of lesions. This test is only done on patients with multiple myeloma and is then only done if clinically indicated.

Magnetic Resonance Imaging (MRI)

An MRI uses a magnetic field and radio waves to take multiple cross-section images of the body, which are then assembled into a three-dimensional image by a computer. It shows the contrast between different types of body tissue in great detail. This test is done only if necessary.

PET Scan

Positron emission tomography (PET) is a type of imaging test that helps doctors see structures and functions inside your body. The test uses a small amount of radioactive substance, usually given by injection. PET scan is only done if needed.

MIBG Scan, iodine-131-meta-iodobenzylguanidine scintiscan

An MIBG scintiscan is an imaging test that uses a radioactive substance (called a tracer) and a special scanner to find or confirm the presence of a tumor, usually an adrenal gland tumor. This test is performed on pediatric patients and is only done when needed.

Pregnancy Test

This test is conducted to determine whether or not you are pregnant.

Psychosocial Assessment

In addition to clearing medical tests, all BMT candidates must also be evaluated by a social worker and/or other members of our Department of Supportive Care Medicine to determine if there are any psychosocial considerations which may preclude eligibility to receive a transplant (e.g., treatment adherence, identified caregiver, support network, transportation, resources, etc.). The social worker can also help you develop a plan in anticipation of your treatment.

Stool Specimens

Stool specimens may need to be collected and tested for infectious organisms, mucus, fat, parasites or blood in the stool.

Thyroid Panel

A blood sample is taken to test the function of your thyroid.

Depending on your insurance provider you may also need to have some of the following tests:

Dental Examination

Decayed teeth and gum disease can cause serious infections in transplant patients. It is very important to have a thorough exam and complete all necessary dental work.

Mammogram

A mammogram is a special type of X-ray of the breasts.

Colonoscopy

Colonoscopy is a procedure that lets your doctor look inside your entire large intestine. It uses an instrument called a colonoscope that has a tiny camera attached to a long, thin tube. The procedure lets your doctor see things such as inflamed tissue, abnormal growths and ulcers.

Central Vascular Access Device

All blood and marrow stem cell transplant patients will need a central vascular access device, also known as a VAD. A VAD is a long, narrow tube, called a catheter, which is placed into a large vein leading directly to your heart which will remain in place throughout your treatment.

Medication can be given directly into your bloodstream using your VAD without having a needle placed repeatedly into the veins in your arms. The VAD also allows intravenous (IV) fluids, blood transfusions and chemotherapy to be given to you as comfortably and as easily as possible. Your VAD also can be used to take blood samples for testing.

There are different types of central VADs such as a PICC (peripherally inserted central catheter), which is inserted into a large vein in your arm, or a “Hickman” type catheter which is inserted into your chest. Your doctor will determine the best type of VAD for your particular situation.

You may have your VAD inserted while you are an outpatient before treatment is started. The procedure is scheduled by your nurse coordinator. It is important for you to know how to care for your VAD before you are discharged from hospital. You may be scheduled to take a class on VAD care before you are admitted and you will also be given written instructions on how to care for your VAD.

Fertility Issues and Reproductive Options

The combined high-dose chemotherapy and radiation therapy given before transplantation may adversely affect your ability to have children. In fact, most patients are unable to have children after transplantation. If this is a concern to you, options such as sperm, egg or embryo freezing may be appropriate for you.

Please discuss fertility concerns and reproductive options with your doctor as soon as possible **before you begin your treatment**. City of Hope *does not* offer sperm banking or egg or embryo freezing services. There are some local companies that provide these services. Most insurance companies do not cover the cost of sperm banking or egg or embryo freezing.