

Ajmera Transplant Program Toronto General Hospital 585 University Ave., 12PMB-100 Toronto, ON M5G 2N2 416-340-4800 x 8495

Date:	 	 		
Door Mr /Mro				
Dear Mr./Mrs. _.				

This is your assessment package for **advanced heart failure therapies**. This includes heart transplant and/or mechanical circulatory support (LVAD).

*Please note you are **not yet listed for a heart transplant**. This package is the start of your assessment.

What to do when you receive this package:

- 1. Review the contents of the package, and note down any questions you may have.
- 2. Please send us a copy of your health card and send it to us via email, mail or fax.
- 3. Call our office to speak with Humaira Memon, at 416 340 4800 ext. 6195.

During this call, we will:

- Speak with you for about 5 to 15 minutes.
- Confirm that you agree to be assessed for heart transplant or LVAD treatment, and that you understand what is involved in the assessment process.
- Review your personal details to make sure our patient records about you are correct.
- Discuss your assessment schedule and important upcoming dates.
- Talk about any questions that you have about the process.

Next Steps

- 1. Fill out the forms in this package and return them to our office. You can e-mail, fax or mail them.
- 2. Note down our office's contact information for future reference.
- 3. Call us if you have questions at any time.

Thank you for your cooperation. We look forward to helping you and your family during your assessment period.

Fernanda Santos, RN, BScN

Clinical Coordinator for The Heart Transplant Assessment Program



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THE HEART TRANSPLANT PROGRAM AT UHN

The Heart Transplant Program at UHN is part of our comprehensive management of patients with advanced heart failure. We are a multidisciplinary team that includes cardiologists, anesthesiologists, cardiac surgeons, nurse practitioners, transplant nurse coordinators, social worker and transplant mentors dedicated to improving patient outcomes.

We perform around 37 heart transplants a year.

We provide support and education throughout your heart transplant journey to help you and your family prepare for your surgery and recovery.

You have been referred to the heart transplant program at UHN because your doctor feels that you have advanced heart failure.

What is Advanced Heart Failure?

Heart failure is any condition where the heart is no longer able to pump blood and meet the body's needs.

You are not alone. About half a million Canadians are living with heart failure and 50.000 new patients are diagnosed each year. About 10 per cent of these patients have advanced heart failure.

Not all patients with heart failure will develop advanced heart failure, even if they appear very sick at first or if they have had the condition for a long time. Patients may improve with treatment.

Advanced heart failure means that heart failure symptoms are getting worse and can no longer be managed effectively with medications or other less invasive surgical procedures such as specialized pacemaker devices.

Common causes of heart failure

- ✓ Coronary artery disease (blocked arteries)
- √ Heart attacks
- ✓ Heart defects at birth
- ✓ Hereditary condition
- ✓ High blood pressure
- ✓ Infection
- ✓ Side effects of medication
- ✓ History of alcohol use
- ✓ Pregnancy
- ✓ Sleep apnea
- ✓ Diabetes



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How do we recognize Advanced Heart Failure?

Patients with advanced heart failure may experience some of the following even when they are taking their medications:

- ✓ Symptoms such as:
 - o shortness of breath
 - fatigue
 - o swelling of their feet, ankles, legs or other body parts
 - o pain
 - nausea and change in appetite
 - confusion
 - anxiety /depression
- ✓ More shocks from their defibrillator.
- ✓ Many hospitalizations related to their heart failure
- ✓ Serious problems with their kidneys or liver

Although every case is a bit different, patients with advanced heart failure usually have a shortened life expectancy.

Some patients may be eligible for special devices, or life-saving treatments such as heart transplantation or mechanical circulatory support devices (mechanical heart pump - LVAD).

In order to determine if you are eligible for heart transplantation it is essential that you complete the heart transplant assessment.

Pre-Heart Transplant Assessment

Your pre-transplant assessment will consist of medical tests and interviews with members of your transplant team.

We want to make sure you're healthy enough for your operation and that there's nothing else wrong with your other organs. The pre-heart transplant assessment can take up to 6 weeks or sometimes months to be completed. If you deteriorate while you are being assessed for a heart transplant you may need to be admitted to the hospital so we can complete the assessment.

It is extremely important that you inform the transplant cardiologist or the transplant nurse coordinator if you get sicker at any time during your heart transplant assessment process.



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After your pre-heart transplant assessment is completed a discussion with the transplant team will determine whether:

- ✓ A heart transplant is your best option
- ✓ Other treatment options would be more beneficial to you
- ✓ You are too healthy or too sick for a heart transplant
- ✓ You have a condition that would preclude you from having a heart transplant.
- ✓ You have a social habit you need to quit before you are accepted for a heart transplant (smoking, drinking, drugs)
- ✓ You are emotionally prepared to deal with the wait time for a donor heart and the recovery process after a heart transplant
- ✓ You have the social support to assist you before and after a heart transplant
- ✓ You are prepared and willing to follow the steps required after a heart transplant (frequent tests, appointments and medication schedule).

Here it is what is included in the pre-heart transplant assessment:

Blood work

We will do tests to look at biochemistry, kidney function, liver function, viral status (including HIV and hepatitis), blood group and tissue typing (to determine if you have antibodies in your blood)

ECG (electrocardiogram)

This test shows the pattern of electrical activity in your heart. Small adhesive tabs with wires will be placed on your chest and legs for a short time to record the electrical pattern. This test does not cause you any discomfort.

Cardiopulmonary Study (cardiopulmonary stress test)

This test involves both pulmonary function tests and exercising either on a bike or a treadmill while you wear ECG wires. The results show how your heart and lungs respond to exercise.

RHC (right heart catheterization)

The right heart catheterization estimates pressures in the heart chambers and lungs.

A catheter is inserted into your heart through the groin, neck or wrist to check the pressures in your right atrium, right ventricle and pulmonary artery.

It is extremely important to measure the pressures in the lungs. If the pressures in the lungs are abnormally high it may increase your risk with transplant or it may prevent you from having a transplant at that time.



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LHC (Left Heart Catheterization)

The left heart catheterization shows if you have any coronary artery disease. It may be requested if you have not done one in the past couple of years. It is done similar to the RHC but with the help of an x-ray equipment. A dye is injected to show how well the blood flows through your coronary arteries.

Echocardiogram

This is a test that uses sound waves to record the position and motion of your heart walls and the internal structures of the heart (for example, heart valves).

Dopplers of the Carotid and Femoral Arteries

This test checks how the blood is flowing into your head and into your legs and feet. We do this test to check for a buildup of calcium (calcification) or cholesterol narrowing of the arteries in your neck (Carotid artery) or your legs (Femoral artery). If you have narrowing of your arteries, you are at risk for stroke or other complications during and after your transplant surgery and this may preclude you from having a heart transplant.

Abdominal Ultrasound

The abdominal ultrasound shows a picture of the major abdominal organs

Pulmonary Function Test

This test shows how well your lungs are working. The test consists of you breathing through a mouthpiece that is connected to an instrument called a spirometer.

CT scan of Chest

This test uses a special x-ray equipment to take detailed pictures of the organs and tissues of the chest including the blood vessels.

Miscellaneous Test:

For Women: PAP and Mammogram testing.

For Men: Prostate Specific Antigen (PSA) blood test.

A Colonoscopy for those patients over 50 year of age or younger if there is a family history of cancer or other high risk markers



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Diabetic patients must have other testings:

Ophthalmology Consult - to check the eyes for any damage from diabetes 24-hour urine to check kidney function Hemoglobin A1C to check blood sugar control

Consultations:

- Social Worker
- Surgery (Heart Surgeon)
- Transplant Coordinator
- Psychiatry, if needed
- Palliative Care Medicine

Other:

Other consultants may be required if you have health problems other than your heart disease or if something shows up in the pre-heart transplant assessment that requires to be followed up.

What is Palliative Care?

Palliative care is a type of health care dedicated to improving the quality of life of patients and their families facing life-threatening illness. Palliative care can be provided by doctors, nurses, social workers, spiritual leaders and others. They will work together with your family physician and cardiologist to make sure you are comfortable and to provide physical, emotional and spiritual support.

Palliative care can be added onto existing care – in other words, palliative care support is available even if you continue seeing your cardiologist, family doctor and other member of your health care team.

What is Advanced Care Planning and why is it important?

Advance Care Planning is a process of thinking about and sharing your wishes for future and personal care. It can help you tell others what would be important if you were ill and unable to communicate and ensures that your care providers are able to respect your wishes.

See more at: http://www.myspeakupplan.ca/make-a-plan/



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Pre- Heart Transplant Assessment Algorithm



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STEP 1

- Cardiology Consult
- you heart doctor refers you to a transplant heart doctor specialist

STEP 2

- Transplant Cardiologist Consult
- a heart doctor specialized in advanced heart failure therapy sees you and decides if a heart transplant or a mechanical heart is what you may need for you heart failure treatment

STEP 3

- Pre-Heart Transplant Assessment
- it combines a series of tests and consults to help deciding if a heart transplant or a mechanical heart pump is an option of treatment for you. The process may take weeks or months

STEP 4

- •Heart Transplant Case Conference
- the heart transplant team will meet to review your tests and make a decision if you are a candidate for advanced heart failure therapies. If you are a candidate for heart transplantation, you will enter the heart transplant wait list on the day your case is presented to the team.

STEP 5

- Heart Transplant Wait list
- it can take hours or years for you to receive a heart transplant. During the wait time, if your heart function
 deteriorates the team may decide that your best option is to have a mechanical heart implanted as a bridge to
 transplant. Only after three months you received a mechanical heart you will be legible t receive a heart transplant

STEP 6

- Heart Transplant Surgery
- a heart donor becomes available. You are called in to Toronto General Hospital to have your surgery. Your surgery may take 4 to 6 hours

STEP 7

- CVICU (Cardiovascular Intensive Care Unit)
- The length in CVICU will depend on how well you did during surgery and how well you will do in the next 24 hours post heart transplant surgery. A minimum of 2 days is required in the ICU care before you are discharged to the transplant ward

STEP 8

- Transplant Step-Down and Ward
- We will continue to support your recovery on the transplant step-down or ward. You will receive education regarding your new medications, diet, exercising and how to live a healthy life post heart transplant. You will also learn how to use easy call, your route to reach your transplant coordinators after you are discharged home.

STEP 9

- Home
- You made it home! We will send you home with all the information you will need to continue on your path for a full recovery. We will let you know of all your upcoming appointments and the date for your next heart biopsy before you leave the hospital. Give yourself 6 months to one year to completely recover.