

Everything You Need To Know About Cardiac Transplant

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Heart transplant, also known as Cardiac transplant, is a surgical process in which the damaged or diseased heart is replaced with a healthy heart from a donor. It is used to treat the most serious cases of [heart disease](#) when all the other options such as medication, lifestyle changes and less invasive procedures haven't been successful.

The patient's medical condition is thoroughly evaluated to determine his/her suitability for undergoing a transplantation surgery. Usually, the people eligible for receiving a heart are those who have experienced heart failure due to reasons such as insufficient pumping by the existing heart, a malfunctioning electrical conduction system of the heart which is responsible for determining the heart rate, rhythm and sequence of contraction of the heart muscle, [coronary artery disease](#), valve dysfunction, congenital defect, or a weakened heart muscle known as Cardiomyopathy etc. Apart from these, the patients must satisfy certain other criteria to be eligible for a transplant. All the other important organs in the body must be functioning properly. Preferably, the patient must be under 65 years of age. In addition, transplants cannot be

performed in patients suffering from an infection, cancer or advanced stages of diabetes. Smoking and alcohol consumption also negatively impact a person's suitability for a transplant.

Due to an insufficient number of donors, heart transplant is not carried out in all the cases where it is required. The donor heart should be compatible with the recipient's tissue- type and immune system to reduce the chances of rejection by the recipient's body. The donor must also be a person who is brain-dead, but still alive. For these reasons, since the demand for a healthy heart far exceeds the supply, the distribution is done after rigorous checks to determine the patient with the most urgent need for a transplant that stand to benefit the most from a surgery.

Once a person is declared eligible for a transplant, he/she is added to a waiting list. It may take several weeks or months or even years to find a suitable heart. Once a healthy donor heart is found, it is crucial that the process be carried out as soon as possible, while the donor heart is still beating. Usually, the time limit for a surgery to be carried out is six hours. Therefore, it is often transported via air or through green corridors created within the city for that particular purpose. We have often heard in newspapers cases where the heart was transported between different cities.

The [heart transplantation procedure](#) usually spans for about 4-6 hours. First, a general anaesthetic is administered to the patient. A cut is made in the breastbone to access the heart. During the interim period when the surgery is being carried out, the patient is connected to a heart-lung bypass machine to facilitate proper blood circulation inside the body. The donor heart is then stitched into place. Once the donor heart starts beating, the bypass machine is disconnected. Tubes are inserted which drains the fluid, blood and air out of the chest to allow the lungs to re-expand fully and the breastbone is closed with a wire.

Post-surgery, the patient is taken to the Intensive Care Unit (ICU) where his/her condition is constantly monitored. Medication and immuno suppressants are given to the patient to enable the body to accept the new heart and to help in recovery. Depending on the individual's rate of recovery, he/she may be in the hospital for about one to three weeks. In some cases, it may take up to 6 months for complete recovery. Some risks of a heart

transplant include blood clots, damage to kidneys and lungs, [heart rhythm problems](#), rejection of the heart etc.

After recovery, the patient can resume his normal duties and outdoor activities, usually at the end of three months after the surgery. Some precautions are necessary such as a healthy diet, regular medication and constant monitoring of the health. On the bright side, the average survival rates after successful heart transplants are high.