

## HEALTHLINES

# Understanding heart failure



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**The function of the heart is to pump blood across the body to supply oxygen to all the organs, and when it fails to work this way, it is known as heart failure. It usually happens when the heart is not strong enough to gather oxygen from the lungs or pump the oxygen rich blood around the body.**

The blood that should be pumped out of your heart backs up and collects in the lungs and other parts of your body. This is why you may experience shortness of breath and swelling in your hands, legs, and feet. Some people with heart failure have enlarged hearts, which can be seen on a chest x-ray. As a weak heart struggles to pump out all its blood, the muscle fibers of the heart stretch. Over time, this extra stretching leaves the heart with larger, weaker chambers. This causes serious health problems and immediate medical attention is needed. Early diagnosis and medication may help to lead a more active life than without treatment.

But with medication if the condition doesn't change, it is referred to as end-stage heart failure. It is important to consult an experienced cardiologist for diagnosis and accurate treatment.

**How to recognize heart failure?**

Some are easy to confuse with normal aging or other diseases. The more advanced the heart failure is, symptoms are also more likely to get worse. The following are few common ways to get indications from the heart -

\* **Shortness of breath** - if you find it hard to breathe after climbing a few stairs, or feel trouble even while sitting still.

\* **Sleep problems** - due to breathlessness, trouble nodding off to sleep or getting up suddenly in the middle of the night gasping for air.

\* **Coughing** - dry cough while sleeping and phlegm with pinkish tint while lying down.

\* **Fatigue** - failure of heart make you feel won out.

\* **Swelling** - as the heart is no more able to move blood through the body it gets built up in certain parts leading to swelling.

\* **Loss of appetite** - Feeling of hunger is lost and is pronounced with advanced stage.

\* **Frequent urinations** - Visiting bathroom in the middle of the night more

\* **Heart palpitation** - feeling of racing heart beat as if

heart is beating too fast. To compensate for the amount of blood pumped, it tries to beat faster.

**CLASSIFICATION OF HEART FAILURE**

Classification helps in understanding the chronic and progressive nature of heart disease and helps direct treatment interventions. At Stage A, patients are at high risk for developing heart failure because of pre-existing conditions, including coronary artery disease, hypertension, and diabetes mellitus. At Stage B, patients have structural heart disease and left ventricular systolic dysfunction but are asymptomatic at rest. At Stage C, patients have systolic dysfunction and are experiencing symptoms or they have a history of prior symptoms of heart failure. Finally, at Stage D, patients have refractory symptoms, including dyspnea and fatigue at rest, despite optimal medical therapy. At this stage patients are considered to be at the end stage of heart failure.

**What happens during a heart transplant procedure?**

The heart transplant procedure involves 3 operations. The first operation is to harvest the heart from the donor. The donor is usually a person who has suffered irreversible brain injury, leading to "brain death". People who have had major trauma to the head, where the victim's organs other than brain are working well under life support.

The second operation is to remove the recipient's damaged heart. Removing the damaged heart may be very easy or very difficult, depending on whether the recipient has had previous heart surgery (as is often the case). If there has been previous surgery, cutting through the scar tissue may prolong and complicate removal of the heart.

The third operation is probably the easiest with the technological advancement, this operation basically involves the creation of only five lines of stitches, or "anastomoses". These suture lines connect the large blood vessels entering and leaving the heart. Remarkably, if there are no complications, most patients who have had a heart transplant are home about one week after the surgery. The generosity of donors and their families makes organ transplant possible.

**COMMON DISEASES THAT MAY LEAD TO TRANSPLANTATION****Congestive Heart Failure (CHF)**

End-stage heart failure is a disease in which the heart muscle is failing severely in its attempt to pump blood through the body, and in which all other available treatments are no longer helping to improve the heart's function. End-stage heart failure is the final stage of heart failure. Heart failure, also called congestive heart failure, or CHF, is a condition that occurs when the heart is unable to pump blood sufficiently. Despite its name, a diagnosis of heart failure does NOT mean the heart is about to stop beating. The term "failure" refers to the fact that the heart muscle is failing to pump blood in the normal manner because it has become weakened.

**Cardiomyopathy**

Unlike heart disease due to heart attacks, where there is a problem with adequate blood flow to the heart, cardiomyopathy is a disease of the heart muscle itself. There are many causes of cardiomyopathy, which may include coronary artery disease and heart valve disease. Cardiomyopathy occurs in three major types - dilated, hypertrophic and restrictive - all of which affect your heart's ability to pump blood and deliver it to the rest of your body.

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