

Heart Failure

Overview:

- Heart failure doesn't mean that the heart will stop working at any moment, but that it is not working as effectively as it should.
- Heart failure is caused by the heart's inability to pump an adequate supply of blood to the body.
- Symptoms of heart failure generally depend on the type of the condition. The symptoms can develop quickly or gradually over weeks or months.
- The major goals of treatment in heart failure are alleviating the symptoms, slowing down disease progression, and improving the patient's overall quality of life.
- The key to preventing heart failure is to reduce your risk factors and lead a healthy lifestyle.

Introduction:

Heart failure is a chronic condition that occurs when the heart muscle is not able to pump blood around the body efficiently, failing to supply the cells with sufficient blood. Certain conditions (such as: high blood pressure and others) gradually leave your heart too weak or stiff to fill and pump efficiently. Having heart failure doesn't mean that the heart has stopped working, but that it needs some support to help it work better. Although heart failure can affect people of all ages, it is more common among the elderly.

Other Names:

Congestive heart failure.



Type of Heart Failure:

- Left-sided heart failure: fluid may back up in the lungs, causing shortness of breath.
- Right-sided heart failure: fluid may back up in the abdomen, legs and feet, causing swelling.
- Systolic heart failure: the heart muscle can't contract vigorously.
- Diastolic heart failure: the heart muscle can't relax or fill fully.

Cause:

Heart failure often develops after other conditions (like a previous clot) have weakened the heart muscle or damaged parts of it, which causes it to become stiff and not fill up with blood properly, restricting the heart from pumping blood efficiently throughout the body. Heart failure can affect the left side (left ventricle) or the right side (right ventricle) of the heart, or both at the same time.

Risk Factors:

- · Advanced age.
- Chronic diseases (such as: high blood pressure, coronary artery disease, and others).
- Heart valve problems.
- Irregular heartbeats.
- Congenital heart disease.
- Heart attack.
- Severe pulmonary disease.
- Sleep apnea.
- Certain viruses.
- Obesity.
- Alcohol use.
- Smoking.



Symptoms:

Symptoms of heart failure generally depend on the type of the condition. The symptoms can develop quickly (acute heart failure) or gradually over weeks or months (chronic heart failure). Heart failure signs and symptoms may include:

- Shortness of breath.
- Fatigue and exhaustion.
- · Chest pain.
- Loss of appetite and nausea.
- Swelling of the legs and feet.
- Weight gain from fluid retention.
- Irregular heartbeats.
- Inability to engage in physical activity.
- Persistent cough or wheezing especially at night.
- Increased need to urinate at night.

Although these signs and symptoms may be due to heart failure, there are many other possible causes, including other lung conditions.

When to See a Doctor:

Visit your doctor as soon as you start experiencing any of the abovementioned signs or symptoms of heart failure.

Complications:

- Deterioration of heart function (if left untreated).
- Kidney failure.
- Liver damage.
- Heart valve problems.
- Irregular heartbeats.



Diagnosis:

- Physical examination.
- Medical history.
- Laboratory tests.
- Other procedures, such as: electrocardiogram (ECG), echocardiogram, and chest X-ray, as well as Holter monitoring to measure and record the electrical signals in the heart (A Holter monitor is a small portable device).

Treatment:

Heart failure is a chronic disease that needs lifelong management. The available treatment options can't cure the disease, but they can help manage the condition by alleviating the symptoms, slowing down disease progression, and improving the patient's overall quality of life. Treatment options include:

- Lifestyle changes.
- Medications: these include medication that improve heart function (beta blockers), certain vasodilators that dilate (open) blood vessels, diuretics, aldosterone antagonists, and anticoagulants.
- Medical devices that can be implanted in the chest, such as: pacemakers and implantable cardioverter-defibrillators.
- Surgery if the patient's condition requires it.
- Heart transplant (provided that certain conditions are met).

Treatment may be possible when heart failure is caused by a treatable condition (such as: heart valve problems). In this case, the patient can be treated with a heart valve repair or replacement surgery.



Prevention:

The key to prevent heart failure is to reduce your risk factors and lead a healthy lifestyle; this includes:

- · Maintaining a healthy diet.
- Exercising regularly.
- Maintaining a healthy weight.
- Controlling certain chronic conditions.
- Avoiding smoking.

Guidelines for Patients Suffering from Heart Failure:

- Make sure to carry your medical ID card on you at all times in case of an emergency.
- Make sure to take all the necessary vaccines (such as: the seasonal influenza vaccine and the pneumococcal vaccine).
- Maintain a healthy weight to prevent your heart from working too hard.
- Follow the doctor's recommendations regarding the amount of fluid you have each day.
- Avoid stopping certain medications or changing the dosage without consulting your doctor.
- Make sure that you know all your medications' names and usage patterns (doses, dose frequency, and any special instructions).
- Engage in physical activity as instructed by your doctor.
- Maintain regular medical checkups.
- Limit your salt intake.
- Measure your weight every morning and discuss your recommended weight range with your doctor.
- Get enough sleep.
- Consult your doctor before traveling.
- Quit smoking.



Frequently Asked Questions:

- Are patients advised to limit their caffeine intake or cut it out of their diet entirely?
 - Caffeine is allowed (e.g. coffee and tea) as long as the amount does not exceed 300 mg.
- Can a patient engage in physical activity without needing special instructions from the doctor? If not, what are those instruction? It depends on the type of heart failure the patient suffers from, but it is advisable for the patient to consult their doctors regarding the permitted levels of physical activity.
- Does having a weak heart mean you suffer from heart failure?
 Not necessarily. The heart may be weak, but it can still function properly.

Misconceptions:

- Patients are advised not to engage in sexual activity.
 - **Fact**: Not necessarily.
- Patients should avoid all physical activity.

Fact: This is generally what heart patients are advised; however, It does not have to include all physical activity as long as the type and intensity level of the physical activity can be determined by the doctor.

Clinical Health Education Department

For more information, please contact us by <a href="mailto:ema