

Types of Heart Failure

Heart failure (HF) is an abnormal clinical syndrome that involves inadequate pumping and/or filling of the heart. It is associated with a number of cardiovascular diseases, including coronary artery disease, myocardial infarction, and long-standing hypertension. The purpose of this Picmonic is to differentiate the different types of heart failure and their overall presentations.



PLAY PICMONIC

Left Sided

Left dead heart

Left-sided heart failure results from left ventricle dysfunction and can eventually progress to right-sided heart failure. The two types of left-sided heart failure include systolic dysfunction (the left ventricle loses its ability to contract with enough force, resulting in less oxygen-rich blood being pumped into circulation) and diastolic dysfunction (the left ventricle loses its ability to relax properly or has become stiff, resulting in less blood entering the heart during normal filling).

Pulmonary Congestion

Lungs with Congested-traffic

Left ventricular dysfunction prevents normal, forward blood flow from occurring and thus, the blood backs up into the left atrium and pulmonary veins. This increase in pulmonary pressure results in fluid leakage from the pulmonary capillary bed into the interstitium and alveoli causing pulmonary congestion.

Right Sided

Right dead heart

Right-sided heart failure occurs when the right ventricle fails to contract effectively. The primary cause is from left-sided heart failure in which the increase in pulmonary congestion eventually results in chronic pulmonary hypertension (increased right ventricular afterload) leading to right-sided hypertrophy and heart failure.

Peripheral Edema

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Peripheral edema is a classic sign of right-sided heart failure as a result of the backup of blood into the right atrium and venous circulation. Other manifestations include jugular vein distention, hepatosplenomegaly, and vascular congestion of the GI tract.

High Output

High Output dead heart

High output heart failure occurs when the body's need for blood is unusually high in a normally functioning heart. So although the heart may be working well otherwise, it cannot pump out enough blood to keep up with the extra demands.



Unable to Meet Metabolic Needs

Unable to catch Metal-ball

A variety of conditions can significantly increase the body's need for blood and oxygen, resulting in high output heart failure, but the end result is the heart being unable to meet the body's metabolic needs. Such conditions include severe anemia, hyperthyroidism, sepsis, arteriovenous fistula, beriberi (thiamine or Vitamin B1 deficiency), and Paget's disease.