

AEROSPACE CARDIOLOGY, LLC

Heart Failure

Heart failure (HF) is generally defined as inability of the heart to supply sufficient blood flow to meet the body's needs.

Common causes of heart failure include myocardial infarction (heart attacks) and other forms of ischemic heart disease, hypertension, valvular heart disease, and cardiomyopathy.

Heart failure can cause a number of symptoms including shortness of breath, coughing, chronic venous congestion, ankle swelling, and exercise intolerance.

Treatment commonly consists of lifestyle measures (such as smoking cessation, light exercise including breathing protocols, decreased salt intake and other dietary changes) and medications, and sometimes devices or even surgery.

Symptoms of Heart Failure

Fluid Congestion

If the heart becomes less efficient as a pump, the body will try to compensate for it. One way it attempts to do this is by using hormones and nerve signals to increase blood volume (by water retention in the kidneys). A drop in blood flow to the kidneys will also lead to fluid retention. Blood and fluid pressure backed up behind the heart result in excess salt water entering the lungs and other body tissues. However, it is important to note that not all swelling due to fluid retention is a reflection of heart failure.

Clinical symptoms due to fluid congestion:

- shortness of breath
- edema (pooling of fluid in lungs and body)

Reduced Blood Flow to the Body

The heart's inability to pump blood to the muscles and organs isn't always apparent in early stages of heart failure. Often times, it is unmasked only during increases in physical activity. In advanced heart failure, many tissues and organs may not even receive the oxygen they require for functioning at rest.

Clinical symptoms due to poor blood flow to the body:

- difficulty exercising
- fatigue
- dizziness (due to low blood pressure)