

Heart failure

By Guido Francesco Guida

Heart failure occurs when the heart loses its ability to pump enough blood through the body. It usually develops slowly often over years, as the heart gradually loses its pumping ability and works less efficiently. How serious is the problem depends on how much pumping capacity the heart has lost. There is a wide range of heart failure, but only an early diagnosis and a close treatment can improve the chance of living longer and better. There are two main categories of heart failure although within each category, symptoms and effects may differ from patient to patient:

q Systolic heart failure. It occurs when the heart's ability to contract decreases. The heart cannot pump with enough force to push a sufficient amount of blood into the circulation. Blood coming into the heart from the lungs may back up and cause fluid to leak into the lungs, a condition known as pulmonary congestion

q Diastolic heart failure. It occurs when the heart has relaxing problems. The heart cannot properly fill with blood because the muscle has become stiff, losing its ability to relax. This form may lead to fluid accumulation, especially in the feet, ankles, and legs. Some patients may have lung congestion.

Heart Failure Recognition

- o The medical record, plan of care, transfer summary, and other referral data should be used to help identify patients with heart failure

Step 2

- o Evaluate the patient for signs and symptoms of heart failure
- o Signs of heart failure include:

Tachycardia

Third heart sound

Increased jugular venous pressure

Positive hepatojugular reflux

Bilateral rales

Peripheral edema not due to venous insufficiency

Laterally displaced apical impulses

Weight gain

- o Symptoms highly suggestive of heart failure include:

dyspnea on exertion

Dyspnea at rest

Orthopnea

Paroxysmal nocturnal dyspnea

Decreased exercise tolerance

Unexplained cough, especially at night

o Symptoms less frequently due to heart failure include:

Acute confusional state-delirium

Abdominal symptoms (nausea, abdominal pain or distention)

Decreased food intake

Decline in functional status

Step 3

o Evaluate for the presence of risk factors and document findings in the medical record

o Risk factors for heart failure include:

Coronary artery disease (angina or myocardial infarction)

Chronic hypertension

Idiopathic dilated cardiomyopathy

Valvular heart disease (mitral regurgitation, aortic stenosis)

Other cardiomyopathy (for example, sarcoidosis)

Arrhythmia (for example, atrial fibrillation)

Anemia

Volume overload due to non cardiac reasons

Thyroid disease (hypo- or hyperthyroidism)

o If the patient has risk factors, determine if treatment or a change in treatment is indicated

General measures and advices

q Diet: salt intake and fluid restriction in advanced heart failure. Consider salt substitutes

q Smoking cessation

q Alcohol: moderate intake permitted

q Obesity: consider weight reduction

q Abnormal weight loss: small frequent meals, exercise

q Travelling: caution against long air flights in advanced heart failure

q Caution for humid climates, and high altitudes

q Sexual activity: counselling, reassurance patients and partners

q Vaccination: influenza, pneumococcus