Definition

- Chronic heart failure occurs when the heart is unable to pump enough blood to sustain adequate circulation in the body’s tissues.
- The initial manifestation in heart failure is a decrease in blood output from the left ventricle. In many cases, this decrease in pumping output is accompanied by errant impulses from the heart’s electrical system. These can result in accelerated rhythms that adversely affect the heart’s ability to pump blood and are potentially lethal.
- While heart failure is a serious condition, it is not necessarily the death sentence that its name suggests. Thousands of heart failure patients live well with this condition.

Symptoms

- Fatigue
- Dyspnea (shortness of breath from any type of exertion)
- Edema (swelling, usually of the feet and ankles)

Causes

- Heart failure is typically a late manifestation of one or more other cardiovascular diseases, including coronary artery disease, hypertension and valvular disease.
- Restricted blood flow to the heart muscle (coronary artery disease or ischemic heart disease) is thought to account for approximately 70 percent of heart failure cases.
- Numerous other disorders and factors may also contribute to the development of heart failure, including metabolic disturbances, toxins or infections, hypersensitivity reactions, and genetic diseases.
- Up to 50 percent of patients with advanced heart failure have electrical conduction problems within the heart, such as rapid heartbeats, which may contribute to a worsening of symptoms.
- As treatment has improved for other heart conditions, particularly myocardial infarctions (heart attacks), more patients survive the short-term event only to develop heart failure later.

Facts and Figures

- Heart failure is the only major cardiac disorder that is increasing in prevalence.
- In heart failure patients, sudden cardiac arrest is responsible for 60 percent of deaths.
- Risk of heart failure increases dramatically with age. Heart failure affects approximately 10 of every 1,000 people over the age of 65.
- Heart failure causes or contributes to an estimated 290,000 deaths per year.

Treatment Options

- The symptoms of heart failure are often treated by traditional medical therapy, including one or more of the following: diuretics (“water pills”), ACE (Angiotensin Converting Enzyme) inhibitors/Angiotensin II Receptor Blockers (ARBs), digoxin and/or beta-blockers.
- Cardiac resynchronization therapy (CRT) is a treatment for heart failure that uses an implantable device to improve the pumping efficiency of the heart and increase blood flow to the body. By improving blood flow, CRT may help to reduce heart failure symptoms and improve quality of life. CRT is intended to complement standard drug therapy and dietary and lifestyle modifications.
Some heart failure patients may also be at risk for sudden cardiac death and are eligible to receive an implantable cardioverter-defibrillator (ICD), a device that uses electrical impulses to stop fatal heart rhythms, or a combination CRT-defibrillator. Recent studies have shown that ICD therapy significantly reduces death from sudden cardiac arrest in patients with heart failure and poor heart pumping function.

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