



## What is Congestive Heart Failure?

Congestive heart failure (CHF) is a term used to describe the heart's inability to pump enough blood to meet the body's needs. Heart failure does not mean that the heart has failed completely, but rather that the heart is not strong enough to meet the body's needs at times of stress or increased activity. The left ventricle normally receives blood from the lungs and pumps blood through the arteries to the brain, internal organs and extremities. When the left ventricle is weak the patient may experience symptoms of low cardiac output: fatigue and dizziness, and symptoms of congestion: shortness of breath on exertion, inability to lay flat and awakening at night-time with shortness of breath. If the CHF becomes severe fluid may leak into the lungs causing "pulmonary edema" and severe respiratory (breathing) difficulties. When the right ventricle fails the patient may also have symptoms of low cardiac output but also experience fluid build-up in the tissues of the body resulting in leg swelling (edema) and congestion of the internal organs.

### Causes of CHF

#### Weakness of the left ventricle can be caused by:

- Longstanding uncontrolled hypertension
- Heart attacks — damage to the heart muscle due to coronary artery disease (blocked arteries)
- Valvular heart disease — longstanding leaking or narrowing of the aortic or mitral valves
- Viral, toxic or metabolic disturbances damaging the heart muscle. Alcohol is the commonest culprit
- Longstanding rapid heart beating (racing) due to some form of arrhythmia
- Congenital abnormalities e.g. ventricular septal defect (a hole between the left and right ventricles)

#### Weakness of the right ventricle may be caused by:

- Failure of the left ventricle
- High blood pressure within the lungs
- Valvular heart disease — pulmonary valve stenosis (narrowing)/tricuspid valve leaking
- Right ventricular infarction (heart attack) due to coronary artery disease
- Congenital abnormalities e.g. atrial septal defect (a hole between the left and right atria)
- Disease affecting the sac surrounding the heart (the pericardium) such as fluid accumulation (effusion) or abnormal thickening (constriction)

### Is CHF dangerous?

Untreated CHF can lead to severe respiratory difficulties which can be life threatening. Fortunately there are many medications which are effective in treating the symptoms and improving the prognosis of CHF. Lifestyle modifications including proper diet and salt restriction can help reduce or eliminate the symptoms of CHF.

It is important for you to recognize the symptoms of heart failure and to alert your physician to any deterioration in your condition. If you act early on, severe heart failure and the need for hospitalization may be avoided.

### Heart Failure Do's and Don'ts

#### Do:

- 1) Get plenty of rest
- 2) Avoid salt in your diet, at the table and in your canned or processed foods
- 3) Keep as active as you can
- 4) Take all your medicines as directed
- 5) Weigh yourself frequently and keep a weight diary – increasing weight can be an early sign of worsening heart failure
- 6) Report any change in symptoms to your doctor
- 7) Drink alcohol only in moderation or not at all if your doctor directs
- 8) Learn about your condition
- 9) Obtain yearly flu shots
- 10) Control other cardiac risk factors and conditions

#### Do Not:

- 1) Eat a lot of salt (salt leads to fluid retention)
- 2) Drink excessive fluids — in general no more than 6-8 cups of fluid/day
- 3) Smoke
- 4) Drink excessive alcohol
- 5) Skip your medications or adjust them without the direction of your physician
- 6) Take over the counter medications, particularly anti-inflammatory agents, without alerting your physician

