HEART FAILURE

Patient Information Fact Sheet

What is heart failure?

Heart failure is a term used to describe a number of conditions that affect the heart's ability to pump blood to the lungs and the rest of the body. Although it sounds like a life-threatening illness, there are effective drug treatments that your doctor can prescribe to manage the condition. If you suffer from heart failure you may experience fatigue, swelling of the ankles and legs, and shortness of breath when lying down. Breathing may be easier when you are propped up on a bed.

What causes heart failure?

Causes can include high blood pressure, a previous heart attack, diseased heart muscle or faulty heart valves. Lung diseases such as chronic bronchitis may also contribute to heart failure. The heart is forced to work harder to pump blood around the body and eventually weakens. As a result, the lungs become fluid-filled, making breathing more difficult. Fluid retention (edema) in other parts of the body causes swelling, particularly in the ankles and legs.

Who is at risk for heart failure?

According to statistics published by the American Heart Association there are around 5.7 million people who suffer from heart failure in the U.S. The incidence of heart failure increases steeply with age and it is more common in men than in women. The number of people with heart failure is thought to be rising; this is partly because people are living longer nowadays, and because more people survive a heart attack.

How is heart failure treated?

Treatment depends partly on the cause of the heart failure. Various tests are used to make an accurate diagnosis. These include a chest x-ray, which will show whether the heart is enlarged and an electrocardiogram (ECG), which can detect any abnormal heart function. A special ultrasound device (echocardiograph) gives an image of the heart on a screen and shows damage to the structure of the heart. None of these tests cause any discomfort.

Drug treatments for heart failure include **digoxin** (Lanoxin), which strengthens the heart's contractions, and **diuretics** (water tablets), which help the body to get rid of excess fluid and reduce swelling. There are many different diuretics available and some preparations contain a combination of two different types of diuretic.

A class of drugs called **ACE inhibitors** bring considerable improvement in many cases of heart failure. They improve the flow of blood by reducing constriction in the blood vessels and can stop the disease progressing. Examples of ACE inhibitors include **captopril** (Capoten), **enalapril** (Vasotec), **fosinopril**, **lisinopril** (Prinivil, Zestril), **perindopril** (Aceon), **quinapril** (Accupril) and **ramipril** (Altace). Several combined preparations containing an ACE inhibitor and a diuretic are also available.

Nitrates help reduce the load on the heart in acute heart failure. Nitrate preparations include **nitroglycerin** (Nitrostat, Nitro-Dur, Minitran), **isosorbide dinitrate** (Dilatrate-SR, Isordil Titradose), and **isosorbide mononitrate** (Monoket). Other drugs that may be prescribed for heart failure

include **aminophylline** and **theophylline**, **hydralazine** and **prazosin**. Three drugs from a class called the **beta-blockers** can now be prescribed for heart failure in certain circumstances. These are **bisoprolol** (Zebeta), **carvedilol** (Coreg) and **nebivolol** (Bystolic).

Candesartan (Atacand), **losartan** (Cozaar) and **valsartan** (Diovan) belong to another class of drugs, known as angiotensin II antagonists, that can also be used to treat some people with heart failure. In addition, **eplerenone** (Inspra), a type of drug known as an aldosterone antagonist, may be used together with standard therapy in some people with heart failure. Your doctor will usually prescribe a combination of two or more drugs. It is important that high blood pressure is controlled.

Self-help measures

There are steps you can take to help treat your heart failure (see below), but seek advice from your doctor. Regular exercise is beneficial in nearly all cases, but check with your doctor first. If you smoke, try to stop. Smoking increases the heart's need for oxygen and causes constriction of the blood vessels. This means that your heart will have to work harder to pump the blood around your body.

- If you smoke, try to stop.
- Try to avoid becoming overweight as this can add to the strain on the heart, especially during exercise.
- Eat sensibly, avoiding high-fat foods. Don't add salt to your cooking or to your food at the table.
- Limit how much alcohol you drink. For women, the recommended consumption is no more than 14 units per week (not more than 2 to 3 units per day); for men the recommended consumption is no more than 21 units per week (not more than 3 to 4 units per day). One unit is equivalent to 1/2 pint of average strength beer (approximately 250mL), 1 glass of wine (125mL) or 1 standard pub measure of spirits (25mL).
- Ask your doctor's advice about exercise. In most cases, regular gentle exercise, such as walking will be encouraged.
- Make sure you take your medication as prescribed. It will help stabilize your heart failure and improve your symptoms.

Further information

American Heart Association: www.heart.org

Last reviewed: May 2013