

Heart failure

In heart failure, the heart does not pump enough blood through the body.

Heart failure is a disease in which the pumping function of the heart slowly decreases. In the beginning, you will notice little of this. But at some point you will get complaints. This makes you tired quickly and short of breath during exercise.

Examine

Blood tests

In blood tests, we take one or more tubes of blood with a hollow needle. This blood is then examined in the laboratory by an analyst.

Blood tests or tests of urine or stool are necessary when the general practitioner or specialist wants to find out more about your health. The doctor also has research done to determine the course of disease and the effect of a treatment.

Heart film (electrocardiogram, E.C.G.)

With a heart film (E.C.G.) we measure the electrical activity of your heart muscle.

The E.C.G device makes this visible in a graph on a screen or on paper. It's a quick and safe investigation that doesn't hurt.

Ultrasound of the heart (echocardiography)

In an echocardiography, the lab technician examines your heart with ultra-sound waves.

These are high-frequency sound waves that you cannot hear or feel. They are also not harmful to your body. These sound waves are reflected back through the heart (echo). As a result, your heart can be seen on a screen during the examination.

The laboratory technician regularly makes recordings of your heart. This will give your cardiologist information about the movements and functioning of your heart muscle and heart valves. This allows the cardiologist to assess how the pumping function of your heart is and whether there are any abnormalities in the heart valves.

Heart research with Rubidium-82 (LNG-076)

With this examination, the blood flow of the heart muscle and the surrounding vessels is made visible. This is done using a radioactive liquid and a PET scanner.

Bicycle test (ergometry)

In a bicycle test, the laboratory technician makes a heart film (E.C.G.) while you exert yourself.

With exercise, the heart has to work harder and needs more energy and oxygen. As a result, abnormalities in the heart are more visible with a heart film (E.C.G.) during exercise than at rest. With a cycling test, the cardiologist can assess how the blood flow to your heart muscle is during exercise.

Cardiac catheterization

In a cardiac catheterization, the cardiologist examines the coronary arteries of the heart.

Through a tube in the artery, the cardiologist slides up a catheter. Through the special catheter, the doctor injects a small amount of contrast fluid into the coronary arteries. On the X-ray screen, the cardiologist can then see how the coronary arteries run, where they are narrowed and how severe those narrowing is. The cardiologist can use a cardiac catheterization as an examination but also as a treatment, such as an angioplasty. During cardiac catheterization, multiple examinations can be done, such as an 'ultrasound examination coronary artery (IVUS) or 'measuring the (blood) pressure in the coronary arteries (Fractional Flow Reserve, FFR)'

There may be a number of reasons why you are receiving a cardiac catheterization, for example:

- you have chest pain (Angina Pectoris)
- there is a problem with your heart valve
- you have had a heart attack
- you have cardiac arrhythmias.

The cardiologist then wants to know exactly what your coronary arteries or your large body artery look like. You can read more about this research [here](#).

Treatments

In case of heart failure, you will be given medication that reduces your symptoms and prevents your heart failure from getting worse. Furthermore, a healthy lifestyle is important.

Placing pacemaker

The cardiologist may place a pacemaker if you have a slow heart rate and/or if your heart is no longer pumping properly.

The pacemaker helps your heart to work as well as possible by regularly giving an electric current. You won't feel any of this. The pacemaker can have 1, 2 or 3 wires/ electrodes. This depends on the reason you are getting the pacemaker. Your cardiologist will discuss this with you in advance.

A pacemaker is a small electronic device. The pacemaker consists of a battery and electronics. These are built into a titanium housing. The body tolerates this metal well. The pacemaker wires / electrodes ensure that the current enters your heart. Through the end of the pacemaker wire, the pacemaker delivers the current impulse to the heart. The electronics of the pacemaker can be compared to a very small computer. The battery ensures that the pacemaker can do its job for years.

Physiotherapy for heart failure

People with heart failure often have less energy for daily activities. Through practice under expert guidance, something can be done about this.



For everyone with heart failure, it is good to keep moving, within their own limits. Due to the heart failure, it may be that your condition has deteriorated sharply. Think of the strength and endurance of the muscles, but also of the exercise capacity of the heart and lungs. Physical therapy can improve this.

You can start this therapy after consultation with your cardiologist or nurse specialist cardiology. Your general practitioner can also give advice on starting the therapy.

Outpatient clinics and departments

Cardiology

Cardiologists specialize in recognizing and treating conditions of the heart and large blood vessels.

Source: Jeroen Bosch Hospital