

# Cardiac Resynchronization Therapy (CRT)

## Your Heart

Every day the heart beats about 100,000 times. It circulates about 2,000 gallons of oxygen-rich blood throughout the body.

The heart has four chambers that work together. The top two chambers are called atria and the bottom two chambers are called ventricles. The atria pump blood to the ventricles. The ventricles pump blood to your lungs and to the rest of your body.

With heart failure, your heart has lost its ability to pump blood as well as it should.

As your heart pumps with less force, it begins to weaken as it tries to pump faster to keep up the blood flow. You may feel tired, short of breath, gain weight, and/or notice swelling in your ankles and feet.

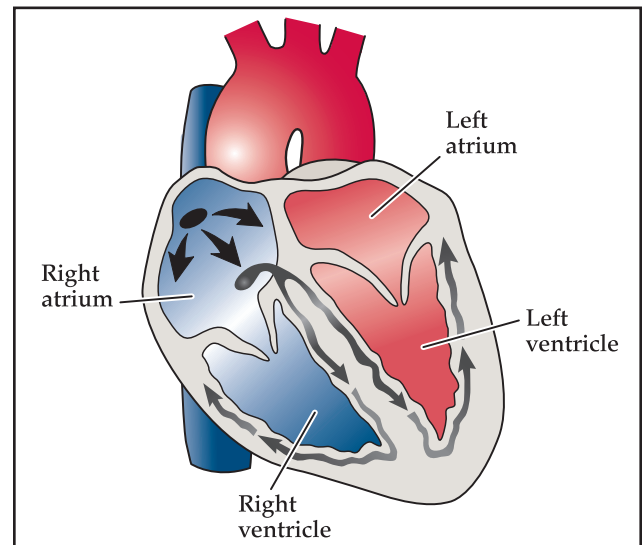
To manage heart failure, you should follow the suggested guidelines around diet, weight, medicines, exercise, activity and quitting smoking. If this isn't enough, your doctor may want you to consider a CRT device.

## CRT Device

A CRT device is a pacemaker. It has a battery (generator) and two or three wires connected to your heart. The battery sends an electrical impulse to your heart. This causes the right and left ventricles of your heart to pump together. By coordinating the chambers, your body will get better blood flow.

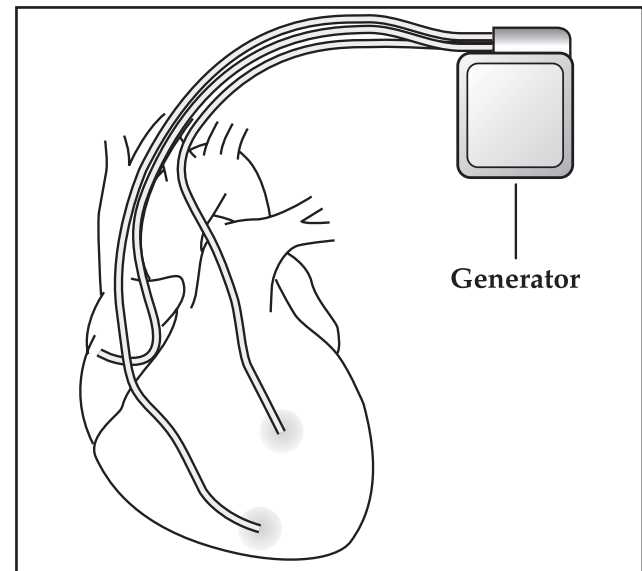
## Before the Procedure

- Talk with your doctor or nurse about all of the medicines you take. Include all prescription, over-the-counter, vitamins, herbal or natural products.



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**The atria pump blood to the ventricles.  
The ventricles pump blood to your body.**



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**A CRT device has three wires and a generator.  
The device will help your heart pump better.**

*(over)*

- Be sure to say if you take a blood thinner such as warfarin (Coumadin®) or medicine for diabetes.
- Tell your nurse or doctor if you have any allergies to medicines, contrast (X-ray) dyes, latex, adhesives or shellfish.
- Arrange to have a responsible adult drive you home the next day after the procedure. You will not be able to drive.
- You may eat up to 8 hours before your procedure.
  - Eat light meals, such as oatmeal or toast.
  - Avoid foods that are heavy or high in fat, such as meat or fried foods.
- Do not use chewing tobacco 6 hours before your procedure.
- You may have clear liquids up to 2 hours before your procedure.
  - Drink water, fruit juice without pulp, black coffee, tea, hard candies and gum.
  - Do not have milk, yogurt or alcohol.
- Follow the special instructions on how to cleanse your skin.

## During the Procedure

- You will be asked to sign a consent form.
- An intravenous (IV) line will be placed in your arm or hand. You will receive three types of medicine through this line: antibiotics (to prevent infection), sedatives (to put you to sleep or make you relaxed), and pain control (for when you wake up).
- Your skin will be shaved where the incision will be made. This will likely be on the left side of your chest, just below the collarbone.
- The doctor will numb the site with medicine before making the incision.
- He or she will thread the device lead wires to your heart through a large vein. The device will be placed where the doctor made the incision.
- The device will be tested before closing the incision.

- A dressing will be secured over the incision site.

## After the Procedure

- You will stay in the hospital overnight.
- You will have a chest X-ray in the morning.
- You may eat as soon as you feel able.
- You will receive a temporary identification card for the device. A permanent card will arrive in the mail. Be sure to keep your card with you at all times.
- Your doctor or nurse will talk with you about the function/settings of your device.
- Your nurse or doctor will talk with you about activity restrictions.
- Your nurse will talk with you about how to care for your incision.
- Feel free to ask anyone on your health care team any questions you have. Remember, you are an important part of the team. It is normal to feel nervous or anxious about the device.
- You will likely be able to leave the hospital the next day as long as someone drives you home.
- At home, continue to follow your everyday heart failure activities of checking your weight, diet, exercise, taking your medicines, and watching for heart failure signs and symptoms.

## Follow-up Appointments

- Keep all follow-up appointments with your health care providers and device clinic.

## When To Call Your Doctor

Call your doctor if you have:

- redness, swelling, warmth or drainage at the incision site
- a fever of 101.5 F or higher.