

# Cardioversion

If your heart has an irregular (uneven) beat or is beating too fast, cardioversion is a way to restore a regular rhythm. Abnormal heart rhythms are called [arrhythmias](#).

There are two kinds of cardioversion. Your doctor may give you one or more medicines to bring back your regular heartbeat. This is called **pharmacologic (chemical) cardioversion**. Doctors also restore regular rhythms by sending an electrical shock to the heart. This is called **electrical cardioversion**.

## Quick facts

- Arrhythmias may prevent blood from circulating properly to your heart and brain.
- Most often, doctors use cardioversion to treat a fast, irregular heart rhythm called [atrial fibrillation](#).
- If you have electrical cardioversion, you'll get medicine to put you to sleep so you don't feel the shock.

## Why do people have cardioversion?

People have non-emergency or elective cardioversion to treat arrhythmias. The electrical signals that control your heartbeat start in the upper right chamber of your heart (atrium). In atrial fibrillation, very fast, irregular electrical signals move through both of the upper chambers of your heart. This can make your heartbeat fast and irregular. Some people who have atrial fibrillation don't notice any changes in the way they feel. But others feel:

- A very fast heartbeat
- Short of breath
- Very tired

Cardioversion also treats other kinds of abnormal heartbeats, including [atrial flutter](#), [atrial tachycardia](#) and [ventricular tachycardia](#).

Cardioversion or defibrillation is also used in emergency situations for people who suffer sudden life threatening arrhythmias.

## What are the risks of cardioversion?

If you have atrial fibrillation, blood clots can form in your heart's left atrium. Cardioversion may knock loose a blood clot in your left atrium. If the clot (embolus) travels to your brain, it can cause a [stroke](#). To avoid this, your doctor may give you medicine (such as [warfarin](#)) to make your blood less likely to form blood clots. If your doctor gives you the medicine, you'll need to take it for 2 to 3 weeks before the procedure. [Transesophageal echocardiography \(TEE\)](#) is often used to check for the presence of blood clots before this procedure.

- If you have an electrical cardioversion, the skin on your chest or back where the paddles are applied may become irritated. Your doctor can tell you about creams to make your skin feel better.
- Cardioversions don't always bring back normal heart rhythms. If normal rhythms don't return, you may need medicines, a [pacemaker or an implantable cardioverter defibrillator \(ICD\)](#).

## How do I prepare for electrical cardioversion?

- Have someone drive you to your appointment, and take you home. Arrange your schedule so you don't have to drive, operate machinery or make any important decisions for the rest of the day after your cardioversion. Don't eat or drink for at least 8 hours

before your cardioversion.

- Unless your doctor has told you not to, take your usual medicines on the morning of your cardioversion. Bring a list of all your medicines (including over-the-counter medicines, herbs and vitamins) to your appointment.
- Leave all of your jewelry at home.
- If you are having an electrical cardioversion, don't put any lotions, powders or ointments on your chest and back for 24 hours before the procedure. They can cause problems with the paddles used to deliver electricity to your heart.

### ***What happens during electrical cardioversion?***

Doctors and nurses perform cardioversion in a hospital or clinic. If medicines bring back your normal rhythm, you may not need electrical cardioversion. If you need electrical cardioversion, it may be done right away or scheduled for another day.

### ***During an electrical cardioversion:***

- Your nurse or doctor will place an IV (intravenous line) in your arm and give you medicine (sedative) to make you sleepy. You won't feel pain during the procedure.
- Your doctor will deliver an electrical shock through two paddles. One is placed on your chest and the other on your back. Or both paddles can be placed on the front of your chest. The shock lasts less than a second, and briefly stops (resets) your heart rhythm.
- Your doctor will check to see if your heartbeat is regular. Some people need only 1 shock. Some need more to restore a regular heartbeat.
- In most cases, patients wake up quickly and don't remember the shock
- The procedure takes about 30 minutes.

"I was worried the cardioversion wouldn't work. When I woke up, they told me my heart rhythm returned to normal within 5 minutes." Suzie, age 33

### ***What happens after cardioversion?***

You can usually go back to your normal activities soon after cardioversion, using only medicines.

### ***After electrical cardioversion:***

- Your nurse will watch you carefully for an hour or more after the procedure.
- You can visit with family members right away, but you may feel sleepy for several hours.
- Your doctor or nurse will tell you if the cardioversion worked. Your doctor will talk to you about whether you need more treatment or need to take antiarrhythmic medication to maintain a normal rhythm.
- You can usually go home the day of your procedure.

### ***What happens after I get home?***

Before you leave, you'll get instructions about what to do at home. For a few days after electrical cardioversion, the skin on your chest and back may be irritated where the paddles were placed. Ask your doctor about creams or medicines that can help.

How can I learn more about cardioversion?

### ***Talk with your doctor. Here are some good questions to ask:***

- Will I still need to take medicine for my abnormal heart rhythms?
- How many times can I have this procedure?
- What will you do if the cardioversion doesn't work?