

## **CARDIOVERSION**

#### What is cardioversion?

If your heart is pump abnormally fast, a procedure called "cardioversion" may be recommended as a way to restore normal timing. This document explains the cardioversion procedure.

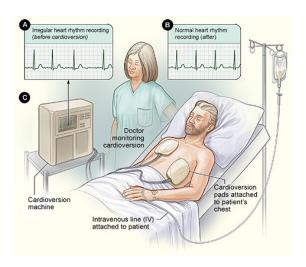
### Why do people need to undergo cardioversion?

There are a number of abnormalities of heart timing, called "arrhythmias," in which the heart is beating too fast. Other names for arrhythmia which you may have already heard of include "atrial fibrillation," "atrial flutter," "atrial tachycardia," "supraventricular tachycardia," and "ventricular tachycardia." These names are not important for you to remember. What is important is that they all can be thought of as "short circuits" in the normal electrical system of the heart, which when operative cause the heart to pump too rapidly. This is not efficient, and may or may not cause symptoms. Typical symptoms include shortness of breath (at rest or with exertion), fluttering or irregular sensation in the chest, other chest discomfort, fatigue, lightheadedness, or fainting. During a cardioversion procedure, an electrical shock is delivered to your heart, which extinguishes the short circuit causing the arrhythmia.

## What happens during cardioversion?

Your nurse or doctor will place an IV (intravenous line) in your arm and give you medicine (sedative) to make you sleep. Therefore, you won't feel pain during nor have any recollection of the procedure.

Your doctor will deliver an electrical shock through two sticky patches which are placed on your chest. The shock lasts less than a second.



"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 are the risks of cardioversion?

There is a very small risk from the anesthesia, which may cause issues with your breathing or allergic reaction that need to be corrected. If you have atrial fibrillation or atrial flutter, there is a small risk of a blood clot forming and then traveling from your heart after cardioversion. If such a clot were to travel to your brain, it could do damage that we call a stroke. Your doctor will discuss this issue with you in detail, but patients who undergo cardioversion for atrial fibrillation or flutter will typically be treated with a blood thinner, such as coumadin, pradaxa, xarelto, or eliquis, both before and after cardioversion. The blood thinner makes this complication less likely. Some patients note that, in the first day or two after cardioversion, the skin where the paddles were applied may be irritated. This will resolve over the next day or two, but if it is uncomfortable there is a cream which we can give you while it heals.

Although cardioversion is very effective at terminating an arrhythmia, it does nothing to repair the short circuit that caused the arrhythmia in the first place. Therefore, there is a risk that the arrhythmia will return. This may occur immediately or in the subsequent hours, days, weeks and months. It is for this reason that, for most patients, cardioversion is part of a strategy for controlling your arrhythmia. Other parts may include drugs or ablation. These items will be described in separate teaching materials.

# How do I prepare for electrical cardioversion?

You will need to have someone come with you who can get you home, as the anesthesia we give you will make it dangerous for you to drive for 24 hours. We will also instruct you not to operate machinery or make any important decisions for 24 hours after cardioversion.

Don't eat or drink after midnight prior to the procedure. Unless instructed otherwise, take your usual medicines on the morning of the procedure. Bring a list of all your medicines (including over-the-counter medicines, herbs and vitamins) with you.

### What happens after 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. If you are not hospitalized for another reason, you will be able to go home once the anesthesia effect has cleared sufficiently. Your doctor will discuss the result of the procedure with you, including what medicines you will need to take as well as followup and interim contact arrangements. Some patients will be given a device for rhythm monitoring at home for a period of time.

### What happens after I get home?

As noted above, no driving, operating dangerous machinery, or making important decisions on the day of the procedure. As of the next day, you may return to normal function unless your doctor has recommended otherwise.



# 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?