University Hospitals
Harrington Heart & Vascular Institute

Electrical Cardioversion

What is cardioversion?

Cardioversion is a treatment for an abnormal heart rhythm or arrhythmia. Cardioversion is used to treat several different arrhythmias, but it is most commonly used to treat atrial flutter or atrial fibrillation. During elective (nonemergent) cardioversion, a controlled electrical current is sent to the heart muscle by special electrodes that are attached to the skin on your chest and back. The goal of cardioversion is to bring back normal rhythm (sinus rhythm). This procedure is performed while you are carefully monitored by your health care team.

What risks are associated with cardioversion?

The main risk related to elective cardioversion is the possibility of a blood clot developing and traveling through your blood, resulting in a stroke. In order to reduce this risk, blood thinners or anticoagulants are usually given before and after your cardioversion. Your physician will determine how long you will need to take blood thinners. Additionally, a transesophageal echocardiogram (TEE) may be performed prior to cardioversion to find out if clots are present in your atria. A TEE is a type of ultrasound where you swallow a small, flexible tube which allows images of your heart to be seen on a monitor. If no clots are present, the cardioversion can be performed. However, if a clot is seen in the atria, the cardioversion will need to be rescheduled once the clot dissolves.

How should I prepare for elective cardioversion?

A typical elective cardioversion is a short procedure that usually only takes about 20 minutes from start to finish, although you should expect to remain in the hospital for several hours to allow for recovery time.

The following information about elective cardioversion may be helpful:

- Bring someone with you to the procedure to drive you home.
- Recovery from cardioversion usually takes only a few hours.
- Do not eat or drink at least eight hours prior to the procedure.
- Discuss which medications to take the day of your procedure with your health care provider.
- If you are diabetic, discuss your diabetes medications and/or insulin dose for the day of the procedure with your health care provider.

Do not apply any lotions, powders or ointment to your chest or back as this may interfere with the adhesive on the cardioversion and monitor pads.

What happens during the cardioversion procedure?

A nurse will insert an IV in your arm through which fluids and sedation may be given. Monitors will be attached to you in order to assess your breathing and vital signs, and special cardioversion pads will be placed on your chest and back.

The cardioversion pads are attached to a defibrillator that delivers the energy or "shock." Your nurse, an anesthesiologist and your doctor will be present. A short-acting sedative will be given prior to delivery of the energy to prevent any pain.

Once you are completely sedated (but still breathing on your own), your doctor will charge the defribrillator and, with the press of a button, deliver the energy. It may take more than one "shock" to restore your heart to a normal rhythm. After the elective cardioversion, you will be groggy and have very little memory of the actual procedure.

You may experience some minor chest discomfort and/or skin tenderness (similar to a mild sunburn) following the procedure. An ointment may be applied to the area to reduce the discomfort. You should avoid driving or operating heavy machinery for at least 24 hours afterward to make sure all of the effects of the sedative have worn off.
Your doctor will discuss the success of the procedure, medication instructions and any additional treatments with you.

For more information on the Atrial Fibrillation Center, please contact our clinical coordinator at **216-983-2260**. For appointments, call **216-844-3800** or visit **UHhospitals.org**.

This bulletin is intended to offer general health information for educational purposes only and does not replace the medical advice or opinion of your doctor or health care provider.

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