What You Need to Know About Cardioversion for AFib

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Cardioversion for Atrial Fibrillation

With contributions for Jeffrey R.

Atrial fibrillation (AFib) presents a wide variety of complications for the patient, but each complication also offers ways in which you can ease them and make life easier. Among these AFib treatment methods is cardioversion, which can change the lives of patients with AFib, due to the ability to correct the heart's rhythm, bringing it back to a normal pace.

By learning more about electrical cardioversion for AFib, you can determine if this treatment method may be right for you.

What Is Electrical Cardioversion?

Electrical cardioversion (EC) is a medical technique that uses a specific level of shock producing electrical current to restore AFib to a normal rhythm.

EC is the first line of therapy for people experiencing low blood pressure, signs of shock, chest pain, confusion, or heart failure. EC is often the second line of treatment, after the administration of IV medication, for individuals with mild or no symptoms.

The Process of Getting Cardioversion

The first thing that is done is determining with your doctor if cardioversion for AFib is the right choice for you. Your doctor will rule out any underlying health problems to ensure you’re a good candidate, and that the procedure is safe for you.

There’s two forms of cardioversion, an emergency form, and a non-emergency form. Generally, non-emergency is used, but the time-frame that it’s used within is dependent upon your unique condition. The facts used to determine if it’s right for you are how long you’ve had AFib for, and how well you’re doing on medication.

If cardioversion turns out to be right for you, you’ll be given a medication that allows you to relax, and works to control pain before administration. You’ll then be prepped for the treatment, and then once it’s over you’ll be given on-going monitoring to ensure it was effective for you, and everything is going according to plan.

How Does Cardioversion for AFib Work?

In most cases, the cardioversion procedure is a hospital outpatient procedure and lasts less than an hour. If you have EC, you will likely be able to return home the same day after it takes place.

A device called a defibrillator delivers the electrical shock. Defibrillator pads or paddles make contact with the individual's chest in specific locations.

Before EC begins, the individual receives a mild sedative to help them fall asleep, so they will not feel any pain from the shocks. Once the person is sleeping, the physician delivers an electrical shock from the defibrillator through defibrillator pads to the heart.

The shock will "jolt" the heart's electrical system back into a normal rhythm. More than one shock is sometimes needed to "reboot" the rhythm.

When the technique is complete, a nurse or other staff member takes you to a recovery area to wake up. Once you feel like you are back to normal, you can return home.

You will need someone to transport you at discharge because your decision-making capabilities decrease for several hours, and you will have to refrain from driving for a full day after EC.

Recovery from EC is generally brief. Many people experience skin tenderness and soreness in the chest wall for the first few days after the procedure.

Your physician will instruct you about what type of appointment you can apply to your skin and what medication to take for the soreness in your chest.

The Risks of Cardioversion for AFib

EC is a low-risk technique, and problems rarely occur. Your physician will take precautions to ensure that complications do not happen.

The main risks with cardioversion are:

- A blood clot present in the heart that breaks off and moves to another area
- EC triggering a different abnormal heart rhythm that is less dangerous
- Burns on the skin around the defibrillator paddle/pad contact
- Low blood pressure (temporary)
- Heart damage (temporary)
- Heart failure

EC is not guaranteed to convert AFib back into a regular rhythm. If EC is unsuccessful, medications such as antiarrhythmics can generate a return of your normal rhythm. Other treatment choices for AFib include cardiac ablation and an implantable pacemaker.

The Benefits of Cardioversion for AFib

National Heart Lung and Blood Institute statistics confirm the success rate of EC for those with AFib is 75 percent or higher. Some individuals do experience a return of AFib later and need a repeat of the EC.

The main benefit of cardioversion is the restoration of a regular rhythm, which allows the heart to resume its usual performance. EC also reduces the risk of the heart muscle becoming weakened by prolonged AFib, as well as decreasing potential complications with the vital organs, brain, and muscle function due to reduced blood flow.

Your physician's assessment often determines the number and frequency of EC procedures you can have in a lifetime. Your physician will make a recommendation based on your previous medical history, current condition, the type of AFib you have, and possible contraindications to the therapy.

Electrical cardioversion is a therapeutic technique that is a practical treatment choice for many people with AFib.

EC has a low complication rate and a short recovery time. EC can also provide AFib sufferers with a significant improvement in the quality of life for those who can sustain a regular rhythm after completion of the procedure.

Cardioversion vs. Defibrillation: Deciding Between the Two

If your doctor has mentioned trying cardioversion or defibrillation as a form of treatment for your AFib, it's best to learn a little bit more about the two and their differences.

Cardioversion and defibrillation are similar procedures because they both involve the use of a defibrillator to send electrical shocks to the heart muscle. The difference between each lies in the amount of electricity used with and timing of each technique.

In EC, the electrical current settings used are 50 to 200 joules. EC is also synchronized, which means the shocks occur at equal time intervals.

Also, EC is the treatment choice for atrial flutter and atrial fibrillation and supraventricular tachycardia.

Defibrillation uses a higher level of energy, usually 200 to 360 joules. Defibrillation is the primary method of treatment for heart arrhythmias that are life-threatening such as ventricular fibrillation and pulseless ventricular tachycardia.

With defibrillation, the shocks happen as soon as the operator pushes the machine’s shock button.

The Bottom Line...

Now that you understand what cardioversion for AFib is, how it works, the risk and benefits, and the differences between cardioversion vs. defibrillation, you'll be ready to make your decision whether cardioversion for AFib is right for you or not.

If you're looking for more information about cardioversion, it's best to talk to your primary care physician. Your health care team will be able to provide additional information and answer any questions you may have about the cardioversion procedure.