FLORIDA ELECTROPHYSIOLOGY ASSOCIATES®

OVERVIEW

Cardiac ablation is a procedure that can correct heart rhythm problems or arrhythmias. An ablation usually uses long, flexible tubes, or catheters, inserted through a vein in your groin and threaded to your heart to correct structural problems in your heart that cause an arrhythmia.

Sometimes cardiac ablation is completed through minimally invasive open-heart surgery, and does not require as much recovery time as traditional open-heart surgery.

INDICATIONS

There is a precise pathway within the heart that electrical impulses follow each time your heart beats. Any interruption in these impulses can cause an abnormal heartbeat (arrhythmia), which can sometimes be treated with cardiac ablation.

Ablation is a treatment option for people who:

- Have tried medications to treat an arrhythmia without success.
- Have had serious side effects from medications to treat arrhythmias.
- Prefer not to take life-long medications for a condition that can be corrected with a simple procedure.
- Have certain types of arrhythmias that respond well to ablation, such as atrial flutter and Wolff-Parkinson-White syndrome.
- Have a high risk of complications from their arrhythmias, such as sudden cardiac arrest

PREPARATION

After your physician evaluates your cardiac testing, they may recommend catheter ablation. Risks and benefits of the procedure will be discussed.

Your physician will let you know if you need to follow any other special instructions before or after your procedure. In some cases, you'll be instructed to stop taking medications to treat a heart arrhythmia several days before your procedure. Let your physician know if you take any blood thinners. You will need to stop eating and drinking the night before your procedure.

If you have an implanted heart device, such as a pacemaker or implantable cardioverter-defibrillator, talk to your doctor to see if you need to take any special precautions.

RISKS

Cardiac ablation carries a risk of complications, including:

- Bleeding or infection at the site where your catheter was inserted
- Damage to your blood vessels where the catheter may have scraped as it traveled to your heart
- Puncture of your heart
- Damage to your heart valves
- Damage to your heart's electrical system, which could worsen your arrhythmia and require a pacemaker to correct
- Blood clots in your legs or lungs (venous thromboembolism)
- Stroke or heart attack
- Narrowing of the veins that carry blood between your lungs and heart (pulmonary vein stenosis)
- Damage to your kidneys from dye used during the procedure
- Death in rare cases

Great care is taken to reduce these risks. Discuss the risks and benefits of cardiac ablation with your doctor to understand if this procedure is right for you.

DURING THE PROCEDURE

Catheter ablation is performed in the hospital. You will be provided with a sedative through a peripheral intravenous line to help you relax just prior to the procedure. In some cases, general anesthesia may be necessary to place you in a sleep-like state, but you will make this informed decision beforehand.

After numbing the area near your femoral veins, and inserting a sheath (tube) over the needle, your physician will thread catheters through the sheath and guide them to several places within your heart. Contrast dye may be injected into the catheter, which allows your blood vessels and heart to be visible using X-ray imaging. The catheters have electrodes at the tips that can be used to send electrical impulses to your heart and record your heart's electrical activity.

This process of using X-ray imaging and other tests to determine what's causing your arrhythmia is called an electrophysiology (EP) study. An EP study is usually done before cardiac ablation in order to determine the most effective way to treat your arrhythmia.

Your physician will then aim the catheter tips at the area of abnormal heart tissues identified in the EP study. Energy will travel through the catheter tips to destroy or create a scar in the tissue that triggers your arrhythmia. The energy used comes from either extreme cold (cryoablation) or heat (radiofrequency).

In some cases, ablation blocks the electrical signals traveling through your heart to stop the abnormal rhythm and forcing the electrical signals to travel through the normal pathway instead.

Cardiac ablation usually takes one to three hours to complete, but complicated procedures may take longer.

Minor discomfort is possible during the procedure when the catheters are manipulated. If you experience any type of severe pain or shortness of breath, let your doctor know.

AFTER THE PROCEDURE

Following your procedure, you will rest for four to six hours to prevent bleeding at your catheter site. Your blood pressure, heart rate and rhythm will be monitored continuously to check for complications of the procedure.

Some people are able to go home the same day of the procedure, and some stay overnight in the hospital depending on which arrhythmia is being treated. Plan to have someone else drive you home after your procedure.

Most will return to normal activities within a few days after having cardiac ablation. Tenderness at the catheter sites may last up to 1 week.

CHANCE FOR SUCCESS

A majority of patients find great success after their cardiac ablation, some people need repeat procedures. Success varies depending on several factors, which can be reviewed during your consultation. Some patients still require medications to control their arrhythmia after the ablation procedure. Even if your arrhythmia is not completely eliminated with the ablation procedure, the medications may work better after the ablation than before.

There are several lifestyle changes for overall cardiovascular health, and to reduce your recurrence of arrhythmias. Your physician may suggest that you:

- Increase your physical activity.
- Quit smoking
- Avoid drinking alcohol
- Eat heart-healthy foods
- Use less salt
- Maintain a healthy weight
- Manage strong emotions, such as anger
- Treat your sleep apnea, if present

CLINICAL TRIALS

To see if you are a candidate for the latest methods, ask us if there are new treatments, testing or interventions to manage your arrhythmia.