



## ***New Hope to Treat Heart Arrhythmias***



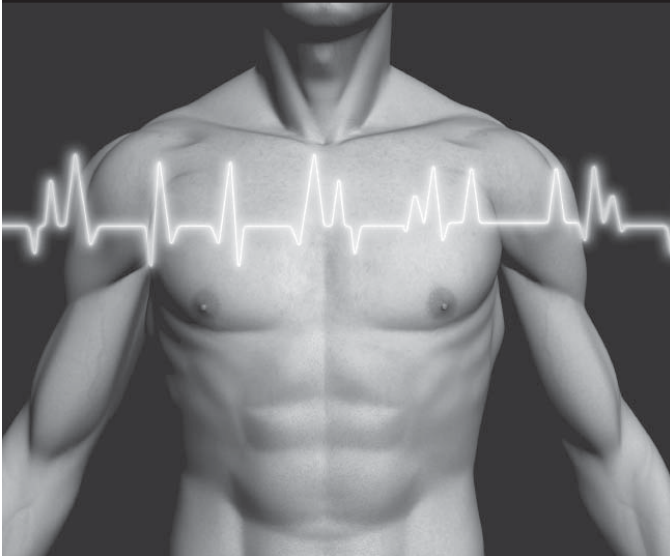
MARSHFIELD CLINIC



MINISTRY HEALTH CARE



*Two Leaders, One Leading Heart Care Team*



More than three million Americans suffer from arrhythmias, an irregular heartbeat caused by “short circuits” in the heart’s electrical system. Most often arrhythmias affect people between the ages of 50 to 70, and while many are not life-threatening, arrhythmias may require medical treatment and should be monitored by your physician. Left untreated, serious arrhythmias can lead to death.

That’s why it’s important to research and understand all of your options when seeking help for an arrhythmia. One of the newest areas in heart care is electrophysiology (EP), which is the treatment of the heart’s electrical system.

Marshfield Clinic and Ministry Health Care has a team of electrophysiologists on staff. These specially-trained cardiologists can precisely identify electrical heart problems and have

access to the most sophisticated procedures and medications to treat arrhythmias once they are diagnosed.

## Symptoms of arrhythmia

You shouldn’t panic if you experience a few flutters occasionally. However, if you experience this in conjunction with these symptoms, contact your physician for a check-up:

- Weakness/fatigue
- Palpitations
- Dizziness
- Fainting
- Shortness of breath
- Chest pain

## What causes arrhythmia

Many times there is no recognizable cause for arrhythmia. But the following causes could lead to arrhythmia:

- Congenital defects
- Heart disease
- Lifestyle
- Medication

## Diagnosing arrhythmia

Your doctor will take a medical history and do a thorough physical exam. Then one or more of the following tests may be used:

### ■ **Electrocardiogram (EKG or ECG)**

The heart’s electrical impulses are recorded and measured to indicate the presence of arrhythmia.

### ■ **Stress test**

Performed by exercise, usually jogging or walking on a treadmill, or by inducing stress through medicine.

### ■ **Holter monitor, event recorder, and implantable memory loop recorder**

Involves wearing or implanting a small, portable recorder

– anywhere from 24 hours up to 18 months – which tracks changes in heart rhythm that may not be detected during a resting or exercise EKG.

### ■ **Electrophysiology study (EPS)**

Test where the doctor inserts a small tube (catheter) through a blood vessel and runs it to the heart in order to more closely determine the cause of the arrhythmia.

## **How arrhythmias are treated**

There are a wide range of treatments available based on the seriousness of your arrhythmia.

### ■ **Lifestyle modification**

Your doctor may suggest you eliminate caffeine,



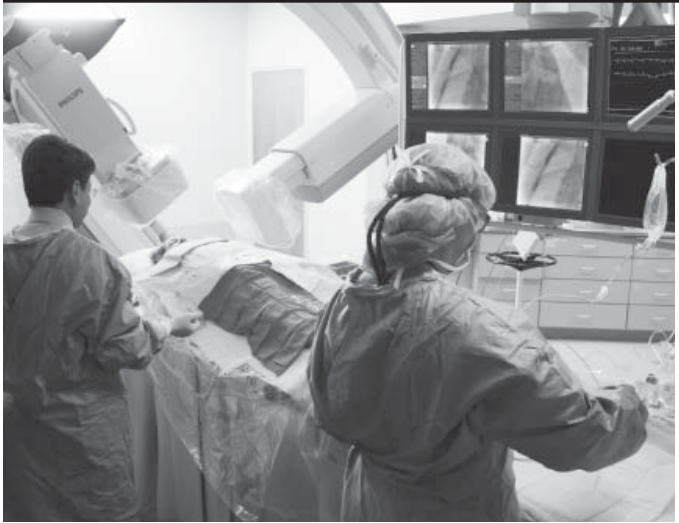
alcohol, or any other substances believed to be causing your arrhythmia. If stress is suspected, you may be asked to consider anxiety-reducing methods including medication, stress-management classes, exercise or psychotherapy.

### ■ **Medications**

Various medications can be used to treat arrhythmias. If your doctor chooses this route, the decision about which medicine to use will be determined by the type of arrhythmia, other conditions which may be present and other medications you are taking.

### ■ **Cardioversion**

In this procedure, the patient is sedated while an electrical signal is sent to the heart through the chest to stop certain fast arrhythmias.



### ■ Ablation

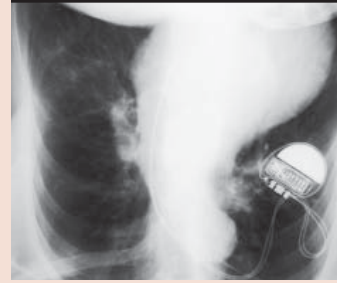
This procedure involves the insertion of a catheter into the heart through a groin or arm blood vessel. Once the arrhythmia site is located through an electrophysiology study, it may then be treated using radiofrequency ablation or cryoablation techniques.

### ■ Pacemaker

A permanent pacemaker is a small device that is placed under the skin (most often in the shoulder area just under the collar



*You can view an ablation procedure, a non-surgical treatment for arrhythmias, performed by our heart care team on the "Learn More" page of [www.oneheartcareteam.org](http://www.oneheartcareteam.org).*



*Saint Joseph's Hospital was the first hospital in central and northern Wisconsin to implant a biventricular pacemaker, which paces both pumping chambers of the heart.*

bone) and sends electrical signals to start or regulate a slow heartbeat. Pacemakers are typically used for slow arrhythmias.

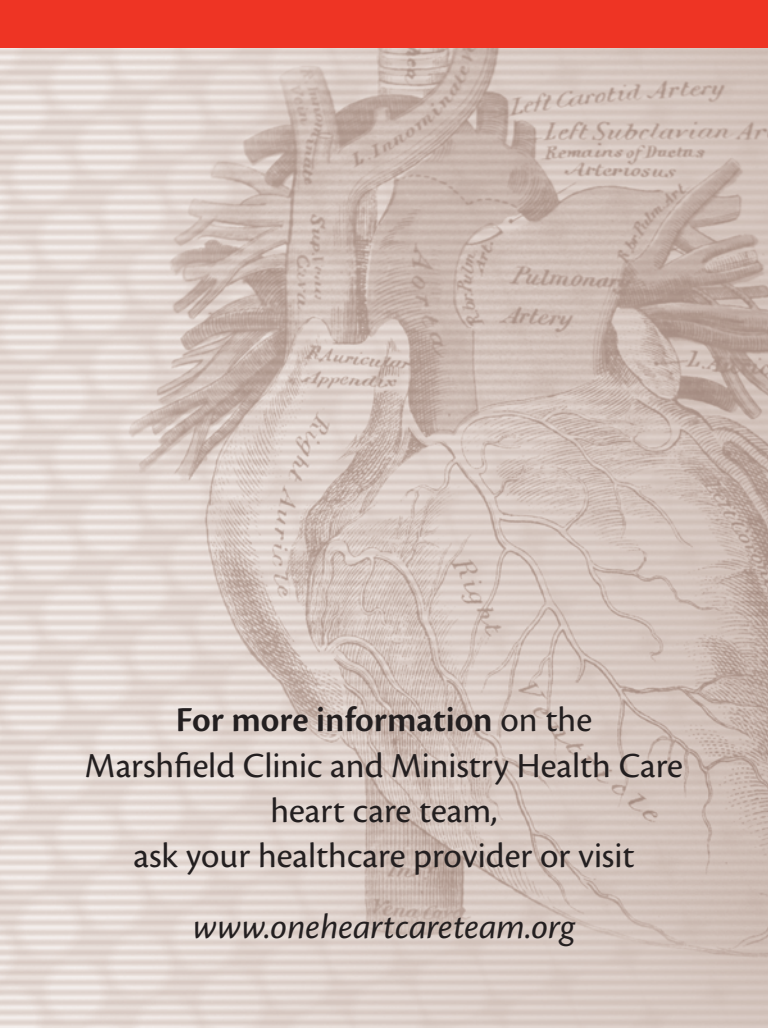
### ■ Implantable cardioverter defibrillator (ICD)

The ICD is also a small device that is implanted under

the skin, most often in the shoulder area just under the collarbone. But unlike pacemakers, ICDs are typically used for fast arrhythmias. An ICD senses the rate of the heartbeat. When the heart rate exceeds a rate programmed into the device, it delivers an electrical signal to slow the heart rate.

### ■ Surgery

When surgical treatment is the most appropriate option, our cardiovascular surgeons, as well as the entire team of cardiac nurses and support staff from Saint Joseph's Hospital in Marshfield and Saint Clare's Hospital in Weston, are available to perform corrective procedures to cure or improve heart arrhythmias.



**For more information** on the  
Marshfield Clinic and Ministry Health Care  
heart care team,  
ask your healthcare provider or visit

[www.oneheartcareteam.org](http://www.oneheartcareteam.org)

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