Atrial Fibrillation & Arrhythmias

Symptoms and Treatments Guidebook

AdventHealth

Atrial Fibrillation

Understanding the condition and your options.

Understanding what atrial fibrillation (Afib) is, how to spot warning signs, and when and where to seek help are important factors in the diagnosis and treatment of the condition. This guide will give you information, resources and answers to common questions about Afib.

Afib is a serious condition, but one for which there are treatment options, especially when it's diagnosed early. According to the American Heart Association, Afib affects an estimated 2.7 million Americans. It is the single most common abnormal heart rhythm in the United States and a leading cause of stroke. In fact, Afib is the underlying cause in about 15 percent of strokes.

Here's what you need to know about atrial fibrillation.

Within the heart, blood flows through four chambers — two upper chambers (atria) and two lower chambers (ventricles). The right upper chamber (the right atrium) has a very important group of cells (the sinus node) that starts the signal to begin each heartbeat.

In a healthy heartbeat, the sinus node sends the impulse through the atria and then to a pathway between the upper and lower chambers of the heart called the atrioventricular (AV) node. When the impulse travels from the sinus node through the atria, the atria contract and pump blood down into the ventricles. As the impulse goes through the AV node to the ventricles, it signals the ventricles to contract and pump blood out to the body.

Afib, a type of heart disease, happens when the heart's upper chambers (atria) receive abnormal electrical signals and begin to quiver. The AV node, which electrically connects the atria and the ventricles, becomes overwhelmed with erratic impulses trying to get to the ventricles. Now, the ventricles also beat faster than normal. Ultimately, the heart's entire rhythm suffers, beating too fast and irregularly. A heart rate during Afib could be up to 175 beats per minute.

Causes and Consequences

Afib can be caused by anything that damages the heart's structure. When it comes to the causes of Afib, there are two main types. For most people with the condition, it is tied to heart disease or a heart abnormality. For those without any underlying heart disease, the condition is sometimes referred to as "lone Afib." In primary (lone) Afib, a root cause often cannot be found. It usually affects people between the ages of 30 and 60.

Afib is a serious medical condition that could need emergency treatment. In addition, it can lead to life-threatening complications. Because blood is not being carried through the heart valves correctly, it can collect and form clots in the heart. If one of these clots travels to the brain, it can block blood flow and cause a stroke.

Learn how to spot risk factors.

A risk factor is anything that increases the likelihood of developing a disease or injury. For Afib, there are some risk factors that you can control and others that you can't. It is important to know these risk factors so that you can talk about them with your doctor.

Controllable Risks

OBESITY

People who are overweight are more likely to have stress on their heart and other heart disease risk factors.

UNHEALTHY DIET

Not eating a healthy diet is linked to being overweight or obese, having high cholesterol, and developing diabetes, which all increase heart disease risk.

PHYSICAL INACTIVITY

Being active is beneficial for your blood pressure, cholesterol, blood sugar levels, blood clotting factors, the health of your blood vessels and reducing inflammation. Even a small increase in activity can reduce heart disease risk, even with existing heart conditions.

HIGH BLOOD PRESSURE

A blood pressure of 140/90 mm Hg or higher is considered high blood pressure, or hypertension. It is a risk factor for coronary heart disease and the single most important risk factor for stroke.

CHOLESTEROL

A 240 mg/dl or higher level for total cholesterol as well as an HDL (good) cholesterol of less than 40 mg/dl (men) or 50 mg/dl (women) are considered risk factors.

DIABETES

Even if blood sugar is controlled, diabetes increases the risk of heart diseases and stroke.

TOBACCO USE

Smoking harms nearly every organ of the body and severely damages your heart and lungs. It has been shown to increase fat in your blood; lower HDL (good) cholesterol; make blood more likely to clot; and cause damage, narrowing and increased plaque buildup within blood vessels.

STRESS

High stress levels can negatively influence other risk factors for heart disease, such as high cholesterol, high blood pressure, smoking, inactivity and body weight.

ALCOHOL OR STIMULANT USE

Alcohol and stimulant use can interfere with the normal electrical impulses of the heart, causing Afib.

Uncontrollable Risks

AGE

Aging is the most common reason people develop Afib. With age, certain areas of the heart can lose normal control mechanisms and produce bursts of rapid heart rate. Age can also contribute to fibrosis, or scarring in the heart that can cause problems with the electrical impulses.

HEART DISEASE

Coronary artery disease, heart failure, and heart valve disease increase the risk of Afib.

OTHER CHRONIC DISEASES

Sleep apnea, thyroid diseases, and other serious illnesses like metabolic syndrome, chronic kidney disease or lung disease have an increased risk of Afib.

What you should look for.

Symptoms of Afib can be different for each person. For example, some people with Afib have no symptoms and do not find out about it until a doctor discovers it during a routine exam. Others may feel some of the following symptoms.

A SKIPPED OR RACING HEARTBEAT

Feelings of a racing, uncomfortable, irregular heartbeat or a flip-flopping in the chest; or a heart rate above the normal range of 50 to 100 beats per minute.

CHEST PAIN

Discomfort that presents as pain or a tight ache, pressure, fullness or squeezing in the center of your chest.

SHORTNESS OF BREATH

Having a hard time breathing normally or deeply, without chest comfort.

DIZZINESS

Feeling dizzy or lightheaded, or fainting.

FATIGUE OR WEAKNESS

Extreme exhaustion and decreased physical and mental ability.

If you have any of these warning signs, make an appointment with your doctor for an exam. Your doctor may do further testing to see if it's Afib, or some other heart rhythm disorder. It's important to note that if you have chest pain, call 9-1-1 immediately. Chest pain is also a critical symptom of a heart attack.

Learn about the different types of Afib.

The three major types of Afib can present with different symptoms and varied persistence.

Occasional

The abnormal heart rate begins suddenly and stops on its own. Symptoms can be mild or severe, but they usually stop in less than 24 hours, or no more than a week. This condition is also called paroxysmal Afib.

Persistent

The abnormal heart rate continues for more than a week. It may stop on its own, or it may need to be resolved with treatment.

Permanent

A normal heart rhythm can't be restored with treatment. Over time, paroxysmal and persistent Afib may become more frequent and result in permanent Afib.

Here's how we diagnose Afib.

If you have any of the warning signs above, it's very important to make an appointment with your doctor, who may review your medical and family history, do a physical exam, and perform an electrocardiogram — also called an ECG or EKG — to test for Afib or another type of arrhythmia.

During the physical exam, your doctor may check to see if your heart is enlarged, listen for heart murmurs or fluid in the lungs, feel your thyroid glands or even test your reflexes. Each part of the exam can help your doctor pinpoint the cause of the Afib.

The most effective tools for diagnosing Afib are the ECG and heart monitors. In a normal heart, the sinus rhythm is a series of bumps and lines that show the contractions of the atria and ventricles. When Afib is present, the bumps in the ECG are replaced by irregular lines.

Finally, your doctor may suggest you have an echocardiogram, where sound waves are used to create images of the heart. This imaging can show how well your heart chambers and valves are functioning, places where there is poor blood flow, and damage that has already occurred to the heart.

Depending on the results of these tests, your doctor may run more tests, including a thyroid-stimulating hormone (TSH) test to identify an overactive thyroid, or perform imaging on the legs or lungs to find any potential blood clots. Blood tests or heart monitors may also be used to help in the diagnosis.

Getting the right treatment for you.

Afib treatment can include medications and surgery. Surgical procedures range from minimally invasive to open-heart procedures, radiofrequency ablation, robotic ablation, cryoablation and Maze procedures.

Medications

In mild cases of atrial fibrillation, or in cases where surgery or other treatments are not an option, a doctor may recommend the following medications:

- Anticoagulants to thin blood and prevent blood clots
- Digoxin to slow the heart rate
- Beta-blockers to slow the heart rate
- Calcium channel blockers to slow the heart rate
- Anti-arrhythmic medications used to maintain normal heart rhythm or convert the heart rhythm to normal

Ablation Procedures

Patients with Afib who aren't treatable with medical therapy may undergo ablation therapy. Ablation is a nonsurgical wire-based procedure that uses energy to correct cardiac tissue triggering Afib.

Maze Procedures

The Maze procedure was designed to disrupt the erratic impulse triggers and circuits that cause Afib. The procedure creates carefully placed scar tissue lesions within the atria to stop the faulty electrical impulses from traveling. This creates only one path that the electrical impulse can take from the SA node to the AV node, which prevents the atrium from fibrillating. There are three variations of the Maze procedure, from most to least invasive: Cox-Maze procedure, Modified-Maze procedure, and Mini-Maze procedure.

We're designed to help patients like you.

Detecting and treating Afib in patients like you is a priority at AdventHealth. As a chosen hospital partner of the American Heart Association in Central Florida, our Centers of Excellence provide revolutionary cardiovascular and thoracic services in valve surgery, arrhythmia and ablation, and vascular surgery. The Cardiovascular Institute helps people treat Afib as early as possible with the goal of preventing possible life-threatening conditions such as stroke.

AdventHealth has more than 160 board-certified cardiologists and cardiovascular surgeons in Central Florida who do everything possible to offer superior outcomes to our patients. We have been an established leader in the fight against heart disease since 1967 and provide comprehensive heart health care.

Serving more than 72,000 patients each year, including approximately 4,650 who undergo heart surgery, our centers are supported by a team of more than 1,000 specially trained nurses and technicians. Our specialists work together to deliver truly comprehensive medicine, from prevention and diagnosis to some of the latest possible advancements in Afib and heart arrhythmia treatment and management.

We're here to talk.

For more information, or for a physician referral, call our cardiac care coordinator at 877-659-9425

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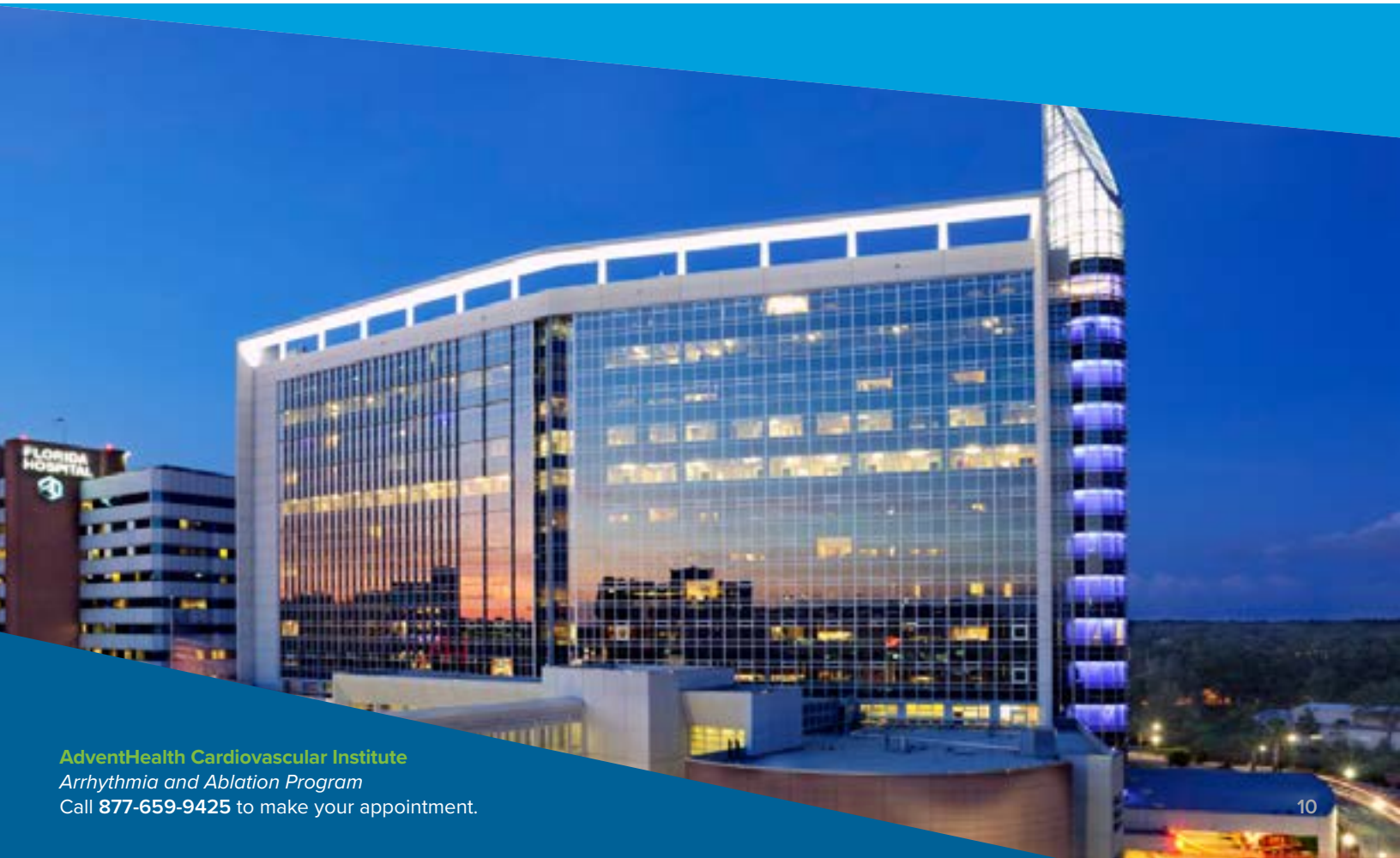
ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al número siguiente.



AdventHealth Cardiovascular Institute
Arrhythmia and Ablation Program
Call **877-659-9425** to make your appointment.