# The Truth About AFib

An arrhythmia (ay-RITH-me-ah) is a problem with the rate or rhythm of the heartbeat, causing the heart to beat too fast, too slow, or irregularly. Atrial fibrillation (AY-tree-ull fib-rah-LAY-shun), or AFib (pronounced ay-fib), is the most common type of arrhythmia, affecting about 2.7 million people in the U.S.

The heart has 2 upper chambers, called the atria (AY-tree-ah), and 2 lower chambers, called the ventricles (VEN-trih-culls). In AFib, the electrical impulses that make the heart pump blood from the atria to the ventricles do not work properly, and not enough blood is pumped into the body.

Atrial fibrillation that comes and goes—paroxysmal (pear-ox-SIZZ-mal) AFib—causes symptoms that may last for a few minutes to hours and stop on their own without treatment. A constant abnormal heart rhythm—chronic AFib—can double the risk of heart-related death and cause a 4- to 5-fold increased risk of stroke if the condition is left untreated.

## How do I know if I'm at risk?

Risk factors for AFib include:

- **Age.** As you get older, your risk of developing AFib becomes greater.
- **Heart disease.** Heart disease, valve problems, heart attack, and heart surgery all increase the risk of developing AFib.
- **High blood pressure.** If high blood pressure is not well controlled, the risk of developing AFib increases.
- **Other chronic conditions.** Thyroid problems, sleep apnea, and other medical problems are associated with an increased risk of developing AFib.
- **Excessive alcohol.** Drinking alcohol can trigger an episode of AFib. Binge drinking—5 drinks in 2 hours for men or 4 drinks in 2 hours for women—may put you at a higher risk.
- **Family history.** AFib runs in some families.

## What are the symptoms?

Some people with AFib do not have any symptoms and only find out they have the condition during a physical examination. But when there is not enough blood to pump to the lungs and body, symptoms can include:

- Palpitations (feelings like your heart is skipping a beat, fluttering, or beating too hard or fast)
- Weakness or fatigue
- Lightheadedness, dizziness, or fainting
- Confusion
- Shortness of breath
- Chest pain

## How can I avoid it?

Following a healthy lifestyle to lower your risk of heart disease may help prevent AFib. Steps include:

- Avoid foods that are high in saturated fat, trans fat, and cholesterol
- Don't smoke
- Exercise
- Maintain a healthy weight
- Work with your doctor to lower high blood pressure if necessary
- Limit or avoid alcohol
- If you have diabetes, control your blood sugar levels
- Take medicines as prescribed

## Are there complications?

There are 2 major complications of AFib:

- **Stroke.** If blood pools in the atria, a blood clot can form that travels through the bloodstream to the brain, causing a stroke.
- **Heart failure.** Atrial fibrillation can weaken the heart and lead to heart failure, a condition in which your heart can't circulate enough blood to meet your body's needs.

## What tests will I need?

To diagnose AFib, your doctor will record your

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medical and family histories and perform a physical examination. Diagnostic tests and procedures may be necessary, including:

- **Electrocardiogram (ee-leck-tro-CAR-dee-oh-gram).** This test uses patches with wires that are attached to your skin to measure electrical impulses given off by your heart.
- **Holter monitor.** This portable machine that you wear under your clothing for 1 to 2 days records all of your heartbeats.
- **Event recorder.** Both types of event recorders—one that uses a phone to transmit signals from a recording machine when you're experiencing symptoms and another that is worn all the time (except in the shower) for up to 1 month—are useful in diagnosing heart rhythm problems that occur at unpredictable times.
- **Echocardiogram (eck-oh-car-dee-oh-gram).** A probe uses sound waves to produce a video image of your heart, which may be used to detect an underlying structural heart disease.
- **Blood tests.** Your doctor may use a blood test to diagnose or rule out problems that may be causing AFib, such as thyroid problems.
- **Chest X-ray.** Your doctor may use a chest X-ray to diagnose conditions in your lungs and heart, other than AFib, which may be causing symptoms.
- **Stress test.** Sometimes heart problems are easier to diagnose when the heart is working hard and beating fast. During a stress test, you exercise or take medication while heart tests are performed.

## How is it treated?

Treatment options differ from patient to patient, depending on the goal of the treatment.

**Blood clot prevention:**

- Blood-thinning medications help prevent blood clots from forming. These medicines include warfarin, dabigatran, heparin, and aspirin.

**Heart rate control:**

- Medications, including beta blockers (eg, metoprolol, atenolol) and calcium channel blockers (eg, diltiazem, verapamil), may be prescribed to lower the heart rate and reduce the risk of AFib complications.
- Atrioventricular (ay-tree-oh-ven-TRICK-you-ler) node ablation is a procedure that applies radiofrequency energy to prevent the atria from sending electrical impulses to the ventricles. A pacemaker is then implanted to establish a normal rhythm.

**Heart rhythm control:**

- Medications called antiarrhythmics (anti-ah-rith-miks) help restore your normal heart rhythm. Medications may be given orally or through an IV at the hospital.
- Electrical cardioversion (CAR-dee-oh-ver-zhun) sends an electrical shock to briefly stop your heart so that when it starts again, it finds a normal rhythm. Following a successful procedure, medication may be prescribed to prevent future episodes of AFib.

If these medications and procedures do not work, your doctor may recommend the following:

- **Radiofrequency catheter ablation,** which targets the areas of the heart that are firing too quickly and scars them or freezes them. This procedure corrects the arrhythmia without the need for medication or implantable devices.
- **Surgical maze procedure,** which is done during open heart surgery. In this procedure, surgeons create a pattern of scar tissue that disrupts the electrical impulses that cause AFib.

People with AFib require ongoing medical care. Visit http://www.nhlbi.nih.gov/health/health-topics/topics/af to learn more about the heart's electrical system and how treatments and lifestyle changes may help you live a normal, active life.

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