

# Atrial Fibrillation (AFib or AF)

## Atrial Fibrillation, or AFib, is the most common sustained heart rhythm disorder.

It affects about 2.7 million people in the United States. The heart has an electrical system, which provides signals to the chambers of the heart indicating when they should contract (squeeze) or relax. AFib is caused by chaotic electrical signals, which make the upper chambers of the heart (the atria) quiver, instead of fully contracting. For someone with AFib, the atria may beat as often as 300 times a minute, about four times faster than normal. Blood can pool in the atria during AFib, which can allow a clot to form. If a blood clot dislodges from the atria, it can cause a stroke.

In addition to causing stroke, AFib can lead to heart failure and to other conditions that cause patients to feel tired, dizzy, and short of breath. AFib is a progressive

condition, meaning that if it is not treated, it can worsen. When this occurs, episodes tend to become more frequent and last longer. It is important to see a doctor if you have symptoms of AFib, because it becomes harder to treat once episodes become more persistent.

### **Risk Factors for AFib**

Even people committed to healthy lifestyles and who have no other medical problems can develop AFib. The most common risk factors include:

- Age over 60
- High blood pressure
- Coronary artery disease
- Heart failure
- Heart valve disease

- Untreated atrial flutter (another type of abnormal heart rhythm)
- Prior open-heart surgery
- Sleep apnea
- Thyroid disease
- Diabetes
- Chronic lung disease
- Excessive alcohol or stimulant use
- Serious illness or infection

### **Symptoms of AFib**

Many people with AFib feel no symptoms at all. Others can tell as soon as it happens. The symptoms of AFib are different for each person. This depends on age, the cause of the AFib (such as heart problems or other diseases), and on how much AFib affects the

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pumping of the heart. Symptoms include:

- Feeling overtired or having little to no energy (most common)
- A faster-than-normal or irregular pulse (switching between fast and slow)
- Shortness of breath
- Heart palpitations (your heart may feel like it is racing, pounding, or fluttering)
- Trouble with everyday exercises or activities
- Pain, pressure, tightness, or discomfort in your chest
- Dizziness, lightheadedness, or fainting
- Increased urination (using the bathroom more often)

### **Diagnosis and Treatment of AFib**

AFib is diagnosed by an electrocardiogram (EKG), which is a test performed in a doctor's office. AFib can also be diagnosed by mobile devices that are worn by the patient to monitor the heart over longer periods of time. These include Holter monitors and event recorders. Patients may wear a Holter monitor for one to seven days and an event recorder for several weeks. These devices record the heart's rhythm throughout the day and night, giving an accurate picture of how the heart is beating during different activities and at rest. Once the doctor diagnoses AFib, the proper treatment can be started.

AFib can be treated with a variety of medications. In some patients,

it is necessary to perform a cardioversion, which is a controlled shock to the heart to restore normal (sinus) rhythm. Catheter ablation is another option for treating AFib for patients for whom medications are not working effectively or who are not interested in taking medications. In catheter ablation, a form of energy renders a small section of problem-causing tissue inactive.

Since AFib can cause blood clots to form in the heart which could then cause a stroke, doctors often prescribe blood thinners (anticoagulants) to prevent blood clots from forming. Doctors can calculate a patient's stroke risk based on age and other medical conditions (such as heart failure, high blood pressure, and diabetes) and advise patients on the risks and benefits of taking anticoagulant medications.