

Atrial Fibrillation

Atrial fibrillation (also called **AF** or **A Fib**) is the most common form of sustained **arrhythmia** (heart rhythm disorder). Atrial fibrillation is more common in older people, people with high blood pressure, and people with other kinds of heart disease. It can lead to serious health problems such as stroke, fatigue, and heart failure. The January 27, 2010, issue of *JAMA* includes an article about treatments for atrial fibrillation. This Patient Page is based on one previously published in the December 19, 2007, issue of *JAMA*.

WHAT IS ATRIAL FIBRILLATION?

Atrial fibrillation occurs when the electrical impulses that cause the heart to beat in a regular rhythmic manner become disorganized, causing the heart to beat irregularly and often too fast with too little force. The irregular pulse can be felt and can be seen on an electrocardiogram. An **electrocardiogram** (ECG or **EKG**) is a recording of the electrical activity of the heart made from **electrodes** (electrical conductors) placed on the surface of the skin, usually on each arm and leg and across the chest. On a normal ECG, the electrical activity of the heart appears as regular peaks and valleys. On an ECG of a person with atrial fibrillation, the peaks and valleys are not regular and often are closer together, representing a faster heartbeat. Atrial fibrillation decreases the efficiency of the pumping action of the heart. It also increases the risk of formation of blood clots inside the heart. These blood clots can break off and go to other parts of the body, including the brain, where they can cause a stroke.



SYMPTOMS

Some people with atrial fibrillation may not experience any symptoms at all. Others report feeling **palpitations** (a sensation of the heart “flopping”) or may have chest discomfort or dizziness. A few people develop sudden and severe shortness of breath.

POSSIBLE TREATMENTS

The two most important treatment goals involve slowing the heart rate to improve heart pumping efficiency and using **anticoagulants** (blood thinners) to prevent stroke.

- **Beta-blockers** and **calcium channel blockers** are types of medication that can slow the heart rate.
- Warfarin and aspirin are blood thinners. Warfarin is more effective in preventing strokes but can lead to bleeding and requires careful medical supervision.
- **Electrical cardioversion** is a procedure that can reestablish regular rhythm for patients with severe symptoms. The patient is sedated and an electrical charge is given to the heart through the chest. **Antiarrhythmic drugs** may also be administered.
- Other procedures involving surgery or use of a **catheter** (a tube inserted into the heart through a blood vessel) are available for individuals with symptoms due to atrial fibrillation.

FOR MORE INFORMATION

- American Heart Association
www.americanheart.org
- National Heart, Lung, and Blood Institute
www.nhlbi.nih.gov

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at www.jama.com. A Patient Page on electrocardiograms was published in the September 13, 2006, issue.

Sources: American College of Cardiology; National Heart, Lung, and Blood Institute; American Heart Association

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