

Atrial Fibrillation Fact Sheet



WWW.ADVANCEDAFIBCENTER.COM

Definition

Atrial fibrillation (AFIB) is an abnormal heart rhythm. The heart's electrical system normally sends regularly spaced, predictable signals, telling the heart muscle to contract or beat. The heart has two upper chambers, called atria, and two lower chambers, called ventricles. Each signal starts in the atria and travels to the rest of the heart. In AFIB, the electrical signals from the atria are fast and irregular. The atria quiver, rather than contract. Some signals do not reach the ventricles and the ventricles continue pumping, usually irregularly and rapidly. This fast, uncoordinated rhythm prevents the heart from efficiently pumping blood out to the body. Blood left in the heart chambers can form clots. These clots may sometimes break away, travel to the brain and cause a stroke.

Causes

In some cases, AFIB is due to an existing heart condition, but most AFIB originates in people with no structural heart problems. However, persistent AFIB can lead to structural changes in the heart. A thyroid disorder or other condition may cause the abnormal rhythm. In some cases, the cause is unknown.

Risk Factors

A risk factor is something that increases your chance of getting a disease or condition.

Cardiovascular diseases

- High blood pressure
- Coronary artery disease

- Congestive heart failure
- Heart attack
- Heart valve disease
- Endocarditis (infection of a heart valve)
- Cardiomyopathy (disease of the heart muscle)
- Congenital heart disease
- Prior episode of AFIB

Lung diseases

- Emphysema
- Asthma
- Blood clots in the lungs

Age 55 or older

Smoking

Chronic medical conditions

- Overactive thyroid
- Diabetes

Excessive alcohol intake

Use of stimulant drugs, including caffeine

Male gender

Undergoing general anesthesia

Stress, either emotional or physical

Symptoms

Symptoms can vary from mild to severe, depending on your heart function and overall health. Some people may not notice any symptoms.

Symptoms include:

- Irregular or rapid pulse or heart beat
- Racing feeling in the chest
- Palpitations, or a pounding feeling in the chest
- Dizziness, lightheadedness, or fainting



ST. JOSEPH'S HOSPITAL

HEART INSTITUTE

Advanced Center For Atrial Fibrillation

4321 N. MacDill Ave., Suite 201 • Tampa, FL 33607 • (813) 877-AFIB (2342)

www.stjosephstampa.com

- Sweating
- Pain or pressure in the chest
- Shortness of breath
- Fatigue or weakness
- Exercise intolerance

Diagnosis

The doctor will:

- Ask about your symptoms and medical history
- Perform a physical exam
- Listen to your heart

Tests may include:

- **Electrocardiogram (ECG, EKG):** a test that records the heart's activity by measuring electrical currents through the heart muscle
- **24-hour Holter monitoring:** wearing a heart monitor that records the heart rhythm for 24 hours
- **Echocardiogram:** a test that uses high-frequency sound waves (ultrasound) to examine the size, shape, and motion of the heart
- **Chest X-rays:** to look for underlying conditions
- **Blood tests:** to look for underlying conditions

Treatment

The goals of treatment are to:

- Restore a regular rhythm, if possible
- Keep heart rate as close to normal as possible
- Prevent blood clots from forming
- Increase quality of life
- Decrease use of medication
- Reduce symptoms of AFIB

Treatments include:

Medication

Drugs to slow heart rate, such as:

- Digitalis
- Verapamil
- Diltiazem
- Propranolol

Drugs to regulate heart rate, such as:

- Quinidine
- Procainamide
- Tambocore
- Rhythmol
- Betapace
- Amiodarone

Drugs to prevent clot formation, called anticoagulants or blood thinners, such as:

- Aspirin
- Warfarin

Cardioversion

Cardioversion is a procedure that uses an electrical current or drugs to help normalize the heart rhythm. If AFIB has lasted 48 hours or more, you may be given blood thinners before this procedure.

Procedures/Surgery

Catheter ablation therapy is an option for people who cannot tolerate medications or when medications fail to maintain a normal heart rhythm. **Pulmonary vein ablation** is a minimally invasive procedure that blocks any impulses firing from within the pulmonary veins, thereby "disconnecting" the pathway of the abnormal rhythm. **Maze surgery** is a procedure where a series of precise incisions are made in the right and left atria to interrupt the conduction of abnormal impulses.

Lifestyle Changes

Avoid caffeine and other stimulants, because they may trigger another episode. Alcohol may also act as a trigger in some people.

Prevention

If you have risk factors for AFIB, avoid known triggers, such as alcohol and caffeine. Follow your doctor's advice for controlling heart disease, high blood pressure, and other conditions.



To learn more about available treatment options and the latest clinical guidelines, please contact the Center at 877-AFIB (2342)

Sources

AHA Medical/Scientific Statement: "Management of Patients With Atrial Fibrillation." American Heart Association, 1996.

Griffith's 5-Minute Clinical Consult, 2001 ed. Lippincott Williams & Wilkins, 2001.

Harrison's Principles of Internal Medicine, 14th ed. The McGraw-Hill Companies, 2000.

Practice of Geriatrics, 3rd ed. W.B. Saunders Company, 1998.

Conn's Current Therapy 2001, 53rd ed. W.B. Saunders Company, 2001.