

ATRIAL FIBRILLATION

What is atrial fibrillation (AF)?

Atrial fibrillation is a disorder found in about 2.2 million Americans. During atrial fibrillation, the heart's two small upper chambers (the atria) quiver instead of beating effectively. Blood isn't pumped completely out of them, so it may pool and clot. If a piece of a blood clot in the atria leaves the heart and becomes lodged in an artery in the brain, a stroke results. About 15 percent of strokes occur in people with atrial fibrillation.

The likelihood of developing atrial fibrillation increases with age. Three to five percent of people over 65 have atrial fibrillation.

How is atrial fibrillation treated?

Several approaches are used to treat and prevent abnormal beating:

- Medications are used to slow down rapid heart rate associated with AF. These treatments may include drugs such as digoxin, beta blockers (atenolol, metoprolol, propranolol), amiodarone, disopyramide, calcium antagonists (verapamil, diltiazem), sotalol, flecainide, procainamide, quinidine, propafenone, etc.
- Electrical cardioversion may be used to restore normal heart rhythm with an electric shock, when medication doesn't improve symptoms.
- Drugs (such as ibutilide) can sometimes restore the heart's normal rhythm. These drugs are given under medical supervision, and are delivered through an IV tube into a vein, usually in the patient's arm.
- Radiofrequency ablation may be effective in some patients when medications don't work. In this procedure, thin and flexible tubes are introduced through a blood vessel and directed to the heart muscle. Then a burst of radiofrequency energy is delivered to destroy tissue that triggers abnormal electrical signals or to block abnormal electrical pathways.
- Surgery can be used to disrupt electrical pathways that generate AF.
- Atrial pacemakers can be implanted under the skin to regulate the heart rhythm.

AHA Recommendation for Stroke Prevention

Treating atrial fibrillation is an important way to help prevent stroke. That's why the American Heart Association recommends aggressive treatment of this heart arrhythmia.

Drugs are also used to help reduce stroke risk in people with AF. Anticoagulant and antiplatelet medications thin the blood and make it less prone to clotting. Coumadin (warfarin) is the anticoagulant now used for this purpose, and aspirin is the antiplatelet drug most often used.

Long-term use of warfarin in patients with AF and other stroke risk factors can reduce stroke by 68 percent.

- Physicians differ on the choice of drugs to prevent embolic stroke — stroke caused by a blood clot. It's clear that warfarin is more effective against this type of stroke than aspirin. However, warfarin has more side effects than aspirin. Examples include potential bleeding problems or ulcer.
- Patients at high risk for stroke should probably be treated with warfarin rather than aspirin unless there are clear reasons not to do so.
- Aspirin is the standard treatment for patients at low risk for stroke and under 75 years of age.