

## Treatment Options for Atrial Fibrillation

The goal of treating atrial fibrillation is to prevent the formation of blood clots, control the number of times per minute the ventricles contract (rate control), restore a normal heart rhythm (rhythm control), and treat any underlying condition that may be contributing to AF, such as hypertension, hyperthyroidism, sleep apnea, and obesity.

### Medications

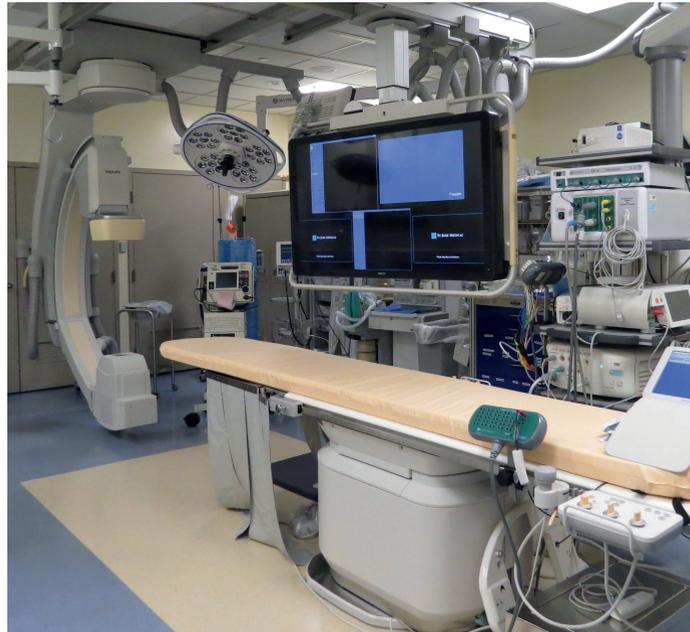
Blood thinning medications, or anticoagulants, are a common approach to treat AF. The prevention of blood clots is perhaps the most important treatment of AF, because if a blood clot forms, it can break off from the heart and travel to the brain, causing a stroke. Common anticoagulants include:

- Warfarin
- Dabigatran
- Rivaroxaban
- Apixaban
- Edoxaban

### Rate Control and Rhythm Control

Other treatment approaches include rate control and rhythm control. Rate control uses medication to slow down heart rate and control how many times a minute the heart's ventricles contract. This is important because it allows the ventricles enough time to completely fill with blood. In this approach, abnormal heart rhythm will continue, however patients may feel better and experience fewer symptoms.

Rhythm control is usually recommended for patients who can't control their AF symptoms through a rate control approach and may be used for patients who recently started having AF. Your doctor will use medication or procedures to restore and maintain your heart rhythm.



Cardiology and Vascular Medicine Center  
St. Elizabeth's Medical Center  
736 Cambridge Street  
Boston, MA 02135  
617-789-3187  
[www.sem.org](http://www.sem.org)

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**Cardiology and Vascular Medicine Center**

**Treatment of Atrial Fibrillation**

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# Cardiology and Vascular Medicine Center

## An Integrated Team of Cardiac Experts

At St. Elizabeth's Medical Center, our team of expert cardiologists and cardiac surgeons are highly skilled in treating patients who have atrial fibrillation. Some patients are able to control their atrial fibrillation through medication therapy. Others may need to undergo a procedure to manage their symptoms. Together, you and your doctor will determine the best treatment method for your individual condition.

## What is Atrial Fibrillation?

Atrial fibrillation (AF) is an abnormal rhythm of the upper chambers of the heart causing electrical impulses traveling to the bottom part of the heart to create an irregular and/or fast heart rhythm. This irregular rhythm can cause symptoms, which may include:

- Fatigue
- Shortness of breath
- Chest discomfort
- Dizziness at times
- Swelling in the legs
- Fluid accumulation in the lungs

This arrhythmia is generally not life-threatening, but it carries with it a higher risk of stroke, and many patients need to take anticoagulants, medications that prevent the blood from clotting, as part of their treatment. Correction of the arrhythmia can significantly improve symptoms, but it doesn't necessarily take away the stroke risk. Only anticoagulation therapy can significantly reduce risk of stroke.

**Procedures for Atrial Fibrillation** Doctors can use several procedures to restore a normal heart rhythm and treat AF.

## Cardioversion

A cardioversion can be performed with medications ("chemical cardioversion"), but is much more commonly performed as an electrical cardioversion. During a cardioversion, the patient is briefly sedated and an electric shock is delivered to the chest by the physician while the patient is asleep. This resets the heart and restores a normal rhythm 85 to 90 percent of the time. Most patients are able to go home the same day as this procedure is performed. A cardioversion may restore normal rhythm, but AF will often recur without other treatments.

## Catheter Ablation

A catheter ablation may be recommended to restore normal heart rhythm if medicines or electrical cardioversion do not work. A cardiac electrophysiologist performs this procedure in which catheters (long, flexible wires) are inserted through a vein in the leg and threaded to the heart. Radio wave energy is sent through the tip of the catheter to create scar tissue at specific areas of the atrium where AF originates, primarily around the pulmonary veins. The procedure can take three to five hours and generally requires a two-day hospital stay. After discharge from the hospital, patients continue taking anticoagulant medications and usually most other medications prescribed for AF until they meet with the electrophysiologist. It is not unusual to have some arrhythmias during a six- to eight-week "healing period" after ablation. Some patients continue to have

AF after this procedure and require a second ablation procedure to achieve control of their AF symptoms. Patients can resume normal activities within a week after having the procedure.

## Convergent Surgical Procedure

Some patients have difficult-to-treat AF and a minimally invasive procedure called the "Convergent Approach" may be recommended. During this procedure, a cardiac surgeon and electrophysiologist work as a team to perform a cardiac ablation. Using a minimally invasive laparoscopic approach with a small incision in the abdomen, the cardiac surgeon performs an ablation across the back wall of the heart. Either later that same day or the next day, an electrophysiologist threads an ablation catheter through a patient's femoral vein in the groin to reach the inside of the heart to ensure the lesions were completed and uses radio wave energy to complete the lesions in areas that are not accessible to the surgeon. Electrophysiology diagnostics are then used to confirm the abnormal electrical signals were interrupted. Most patients treated with the Convergent Approach are able to go home within two to four days, resume a more active lifestyle, and may be able to stop taking medication to treat AF.

[St. Elizabeth's electrophysiology services offers several clinic locations throughout the Steward Health Care network to see patients. For more information on any of these procedures, call 617-789-3187.](#)