The Most Current Management Techniques to Help AF Symptoms

by JEFFREY REDEKOPP

What is the Latest Treatment for Atrial Fibrillation?

Atrial fibrillation (AF) is an arrhythmia that alters the heart's regular electrical conduction pattern. AF often occurs because of an underlying heart, lung, or metabolic disease, or it can happen spontaneously with no known cause. So, what is the latest treatment for atrial fibrillation? We'll take a look at all the current options.

AF's erratic signal transmission causes the heart's upper chambers (the atria) to produce an irregular heartbeat that is either fast or slightly above average. There are different types of AF, with some that start and resolve quickly, and others that are continuous and require medical intervention.

Common symptoms for AF can include:

- Shortness of breath
- Fatigue and weakness
- Dizziness
- Rapid or weak pulse rate
- Discomfort in the chest or neck that can feel like a pounding or a fluttering

AF is a treatable condition for most people, and your treatment options can vary, depending on the type you have and your symptoms. Consult with your cardiologist to find out what treatment plan is right for you.

Treatment With Medications

There are two components of AF that need management: heart rate and heart rhythm.

Heart rate control helps reduce symptoms, maintain or improve the heart's pumping capacity, and decrease the risk of stroke. Heart rhythm control restores the heart's normal rhythm.

Studies show a more significant benefit with rate control because of improved outcomes and that rhythm control medications can have riskier side effects.

The primary goal with rate control is to restore the heart rate to its normal range. These medications fall into two categories: beta-blockers and calcium channel blockers.

Heart Rate Management

Beta-blockers decrease resting and exercise heart rates, reducing the workload on the heart. Common drugs in this class used for AF rate control are:

- Metoprolol

- Atenolol
- Nadolol
- Carvedilol
- Propranolol
- Bisoprolol
- Pindolol

Beta-blocker side effects include:

- Fatigue
- Dizziness
- Sleep disturbances
- Weight gain
- Poor circulation
- Sexual dysfunction

Calcium channel blockers control blood pressure and increase the heart's pumping strength. Diltiazem and verapamil are currently the top choices for managing AF.

Side effects with these drugs are:

- Constipation
- Dizziness
- Rapid heartbeat
- Fatigue
- Headache
- Nausea
- Flushing
- Unusual rashes

Heart Rhythm Management

Heart rhythm drugs, called antiarrhythmics, restore the heart's normal rhythm. The goal here is to decrease AF episode duration and frequency.

American Heart Association recommends using antiarrhythmics to maintain a normal heart rhythm. The medications in this class most often used to treat AF are:

- Amiodarone
- Dronedarone
- Flecainide
- Propafenone
- Sotalol
- Dofetilide

Side effects with these drugs are:

- Nausea
- Fatigue
- Shortness of breath
- Problems with kidney, thyroid, or lung function

Anticoagulation

Some people with AF are candidates for anticoagulation therapy, which reduces the risk of blood clots forming

that can lead to a stroke.

Anticoagulant medications your cardiologist could prescribe are:

- Warfarin
- Dabigatran
- Rivaroxaban
- Apixaban

These medications can sometimes cause severe bruising, blood in the urine or stool, nosebleeds, bleeding gums, or heavier menstrual cycles in women.

Electrical Cardioversion

Research shows that electrical cardioversion is an effective way to resolve AF and it can return the heart to its normal rhythm.

Electrical cardioversion uses electricity to shock the atria back to a regular pumping pattern. Your medical team will sedate you and use a cardiac defibrillator with electrode pads attached to your chest, which will deliver a low-level electric shock.

Sometimes several shocks are necessary to convert AF back to a normal rhythm. An article in the American Journal of Medical Care from July 2017 states that electrical cardioversion returns individuals to a regular rhythm between 50% to 93% of the time, depending on the type of AF.

Electrical cardioversion is often the best choice for people with fast AF experiencing severe symptoms when medication fails to convert the rhythm to normal.

The risks of electrical cardioversion include skin burns and tenderness at the electrode pad site. Failure of the rhythm to convert to normal could require many shocks.

Other risks of electrical cardioversion are:

- Difficulty breathing while sedated
- Abnormal rhythms
- Slow heart rate after the procedure
- Temporary low blood pressure
- Temporary heart damage or heart failure

Surgical Intervention

Open-heart surgery is the best option for some individuals, especially if it is scheduled to address and correct another problem. The Maze procedure is the top choice because it restores heart rate and rhythm while reducing the risk of stroke.

The surgeon performing the procedure makes scar tissue patterns in the atria that interrupt the irregular electrical signals once they have healed. This surgery has a success rate of 70% to 95% for long-term AF resolution.

Occasionally, an individual develops a slow heart rhythm after the surgery and could require an implantable pacemaker. Other risks for the Maze procedure are:

- Excessive bleeding
- Infection
- Blood clots
- Problems caused by anesthesia

- Kidney failure
- Developing different abnormal heart rhythms

Catheter Ablation

Catheter ablation is a non-surgical intervention option for people with AF that does not respond to medication therapy.

This procedure involves the physician inserting a catheter into the groin and threading it up to the heart through the large blood vessels. With the catheter positioned, the physician applies heat or cold to create a series of tiny scars that stop the abnormal impulses.

Studies show that both methods are equally effective in stopping AF and can be the first choice for people with frequent episodes of short-term AF with symptoms. Success rates for people with this type of AF are 70% to 75%, and people who require a second procedure have success rates of 85% to 90%.

People with persistent AF have a 50% success rate with the first procedure. The primary risks with catheter ablation are blood clots and heavy bleeding from a ruptured blood vessel. Other issues with this procedure are:

- Infection at the surgical site
- Damaged heart valves
- Slow heart rate
- Stroke
- Heart attack
- Kidney damage
- New arrhythmia or worsening of the current arrhythmia
- Death in rare cases

The AF treatment plan that is best for you will depend on several factors, including your age, present physical condition, medical history, type of AF, and response to previous attempts to restore a normal rhythm.

Your cardiologist understands all these factors and will help you create a plan with the best chance for treating and possibly eliminating your AF.