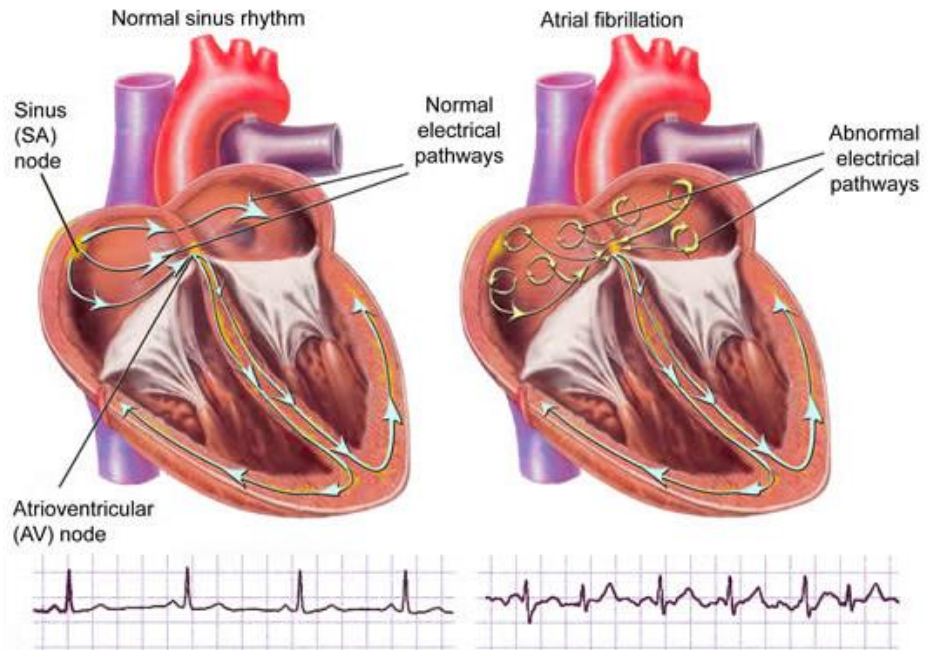


Understanding Atrial Fibrillation

Atrial Fibrillation, sometimes called AFib or AF, is a type of *arrhythmia* or irregular heart rhythm. Arrhythmias occur when the electrical signals in the heart are disturbed.

Atrial fibrillation affects the top two chambers of the heart called the *atria*, which are the heart's collecting chambers.

With a typical heart rhythm, regular electrical signals are sent from the *atria*, the top chambers of the heart, into the pumping chambers (the *ventricles*) below. This electricity follows a typical, organized pattern, creating a regular rhythm that allows blood to be pumped to the rest of the body.



PICTURE: Mayo Clinic (2021). *Atrial Fibrillation*. <https://www.mayoclinic.org/diseases-conditions/atrial-fibrillation/symptoms-causes/syc-20350624>

In AFib, the electrical signals in the atria are fast, irregular, and disorganized. In essence the atria are “fibrillating”, or beating out of synch with the ventricles, which can lead to a decrease in the pumping efficiency of the heart.

The risk of developing atrial fibrillation increases with age and with other risk factors such as diabetes, high blood pressure and underlying heart disease. Most people with AFib lead active, normal lives with treatment; left untreated, however, it can interfere with your quality of life.

Causes

In many cases, the cause of atrial fibrillation is not known, however, the most common risk factor for developing AFib is **high blood pressure**. Other contributory factors include:

- Known valvular diseases or congenital heart defects
- Heart Failure
- Coronary Artery Disease
- Cardiomyopathy
- Diabetes
- Sleep Apnea

Symptoms

Some people with AFib may feel fine and are not aware that they have the condition until it is found during routine testing; others have symptoms. While everyone is affected in a unique way, common symptoms experienced by patients include:

- Palpitations – often described as a “racing heart” or “fluttering” in the chest
- Excessive fatigue and/or weakness with slight physical effort
- Chest discomfort
- Feeling dizzy or lightheaded
- Sweating
- Feeling anxious
- Trouble concentrating

Possible Complications from AFib

The main complications of AFib are stroke and heart failure, so treatment is often aimed at preventing such serious outcomes.

- **Stroke & Blood Clots** – when the atria are not able to move blood efficiently, blood pools and gets stuck in the grooves of the heart. This allows blood clots to form which could get pumped to the brain, lungs, or other parts of the body. It is estimated that one quarter of all strokes after age 40 are caused by AFib. Studies show that long-term use of a blood thinner in patients with AFib can reduce the risk of stroke by 70 to 80%.
- **Heart Failure** – heart failure is a condition in which your heart can't circulate enough blood to meet your body's needs. The irregular, fast heartbeat seen in atrial fibrillation leads to ineffective pumping of the blood which – especially if not controlled – may weaken the heart.

Treatment

Treatment for atrial fibrillation is based on patient risks, medical profile, and severity of symptoms. Your doctor will determine which strategy or combination of strategies is best for you based on your symptoms and other factors.

- **Rate Control** – the first step for most patients with atrial fibrillation is to begin taking a medication to slow the heart rate. For some people, this step is enough to control their symptoms.
- **Rhythm Control** – this is an attempt to eliminate an irregular heartbeat by restoring and maintaining a normal, regular heartbeat. Often this begins with medications, however, some patients may require further interventions such as an *electrical cardioversion*, where a controlled electric shock is applied to the heart to restore a normal rhythm. On rare occasions medications and electrical cardioversion do not work to control symptoms; in such an instance, patients may be referred to an electrophysiologist that can assess whether a catheter ablation to stop the AFib from recurring may be possible.
- **Clot Control** ^β – some patients may be instructed to take an anti-platelet (like Aspirin) or a *anticoagulant*, sometimes called a blood-thinner (like Warfarin), to help control their risk of developing blood clots. Not all patients require this type of intervention, so be sure to ask your doctor if this risk applies to you.

^β **NOTE:** if you are on any anticoagulants, be sure to inform your dentist or any other health care providers prior to undergoing any surgeries or procedures.

Lifestyle & Living with AFib

If you have AFib, you can lower your risk of developing stroke and other heart diseases by knowing and controlling your blood pressure, diabetes, and blood cholesterol levels. It's also important to lead a healthy lifestyle, including the following recommendations:

- Be smoke free
- Be more physically active *
- Aim for a healthy body weight
- Manage emotional and psychosocial stressors **
- Eat a healthy, balanced diet
- Drink less alcohol
- Ensure you follow the medication regime set for you by your physician
- Properly manage all your other medical conditions

* **Don't be afraid to exercise** → Sometimes people feel they can't exercise with atrial fibrillation because they don't feel well or they are afraid. As long as you are feeling well and a doctor hasn't instructed you to stop, you can still exercise.

** **Pay attention to your emotional reaction** → It's normal to feel worried or afraid after a diagnosis of heart disease. Find someone you can turn to for emotional support like a family member, friend, doctor, mental health worker or support group. Talking about your challenges and feelings could be an important part of your journey to recovery.

Adapted from: Heart & Stroke (2022). *Atrial fibrillation: Also called afib*. <https://www.heartandstroke.ca/heart-disease/conditions/atrial-fibrillation>