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**HUFF-WINTERS CENTER
FOR ATRIAL FIBRILLATION**
Newsletter
FALL 2020
WELCOME

The team of heart rhythm specialists at Huff-Winters Center for Atrial Fibrillation, part of Gagnon Cardiovascular Institute at Morristown Medical Center, presents you with our first Atrial Fibrillation Newsletter. This newsletter is designed to provide educational content to patients with atrial fibrillation regarding diagnosis, treatment and frequently asked questions. Our goal is to ensure patients are comfortable and are active participants in the care and management of their atrial fibrillation. Future issues of this newsletter will provide updates on new developments in diagnosis and treatment.

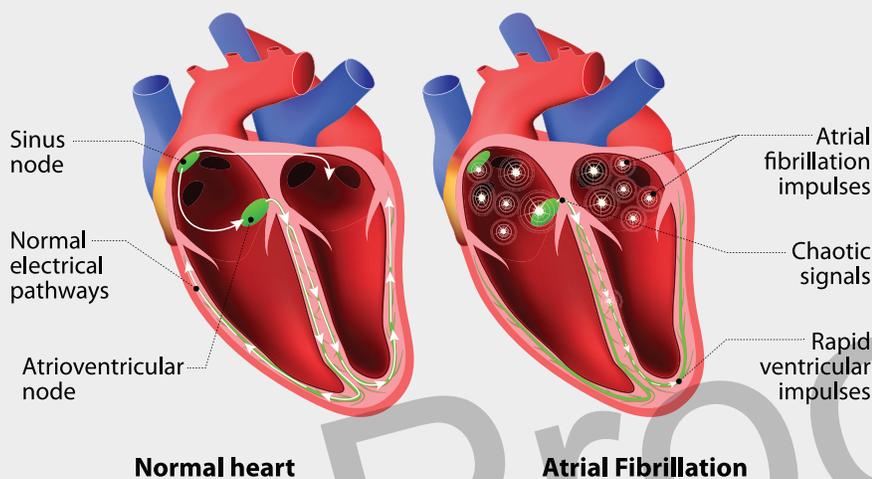
- NEWSLETTER CONTENT
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What Is Atrial Fibrillation (AFib)?

The normal heart has four chambers, two on the top (atria) and two on the bottom (ventricles). The picture below shows the heart as if it were cut in half from top to bottom.

Cardiac arrhythmia



1. The normal heartbeat, or electrical signal, originates in an area known as the sinus or sinoatrial (SA) node in the top right chamber of the heart, or right atrium.
2. The electrical signal is then passed to the atrioventricular (AV) node in the junction between the top and bottom chambers of the heart.
3. The electrical signal then passes through conduction pathways from the AV node to each of the ventricles (bottom two heart chambers).

During the normal heart rhythm or normal “sinus” rhythm, the electrical signal causes the muscle of the heart to contract in a coordinated, regular manner. This ensures that blood does not pool in the top chambers and is pumped out of the heart to the rest of the body effectively.

During atrial fibrillation, the heartbeat, or electrical signal, does not come from the SA node. Instead, electrical signals are produced inappropriately by other cells in the top chambers of the heart. This creates an irregular heart rhythm and the heart does not pump in a coordinated, synchronized manner. This can result in blood pooling in the top chambers of the heart, which may lead to the formation of a blood clot. A blood clot can cause strokes or injury to other organs if it escapes from the heart. Additionally, these inappropriate electrical signals often cause the heart to beat much faster than normal.



Symptoms of Atrial Fibrillation

Symptoms of atrial fibrillation can vary from patient to patient. Some patients feel their atrial fibrillation while other patients do not. Symptoms that a patient might feel while in AFib can include:

- Palpitations
- Irregular beating
- Chest discomfort
- Lightheadedness
- Fainting episode
- Shortness of breath
- Fatigue

Diagnosing Atrial Fibrillation

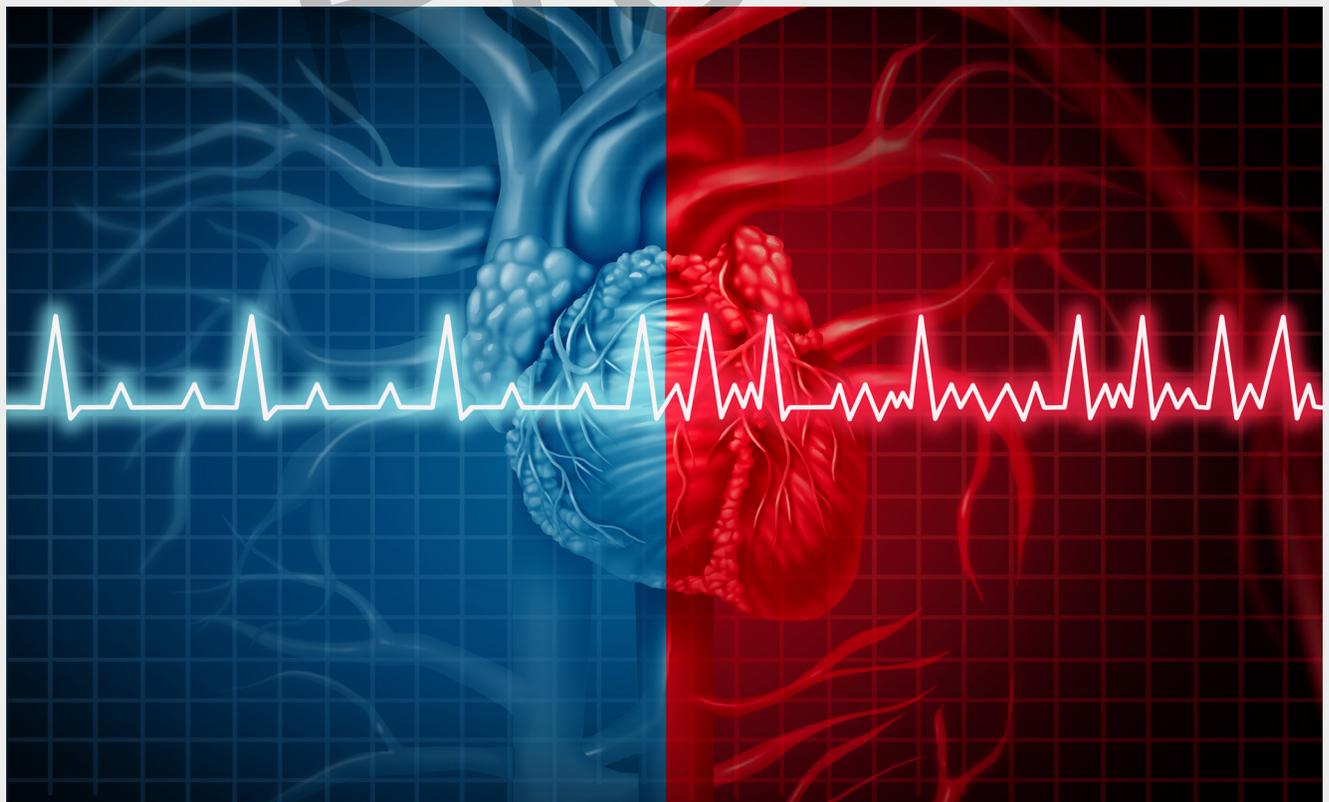
Your health care provider may hear a fast heartbeat while listening to your heart with a stethoscope. Your pulse may feel fast, uneven, or both. The normal heart rate is 60 to 100 beats per minute. In atrial fibrillation, the heart rate may be 100 to 175 beats per minute.

Atrial fibrillation is diagnosed with an electrocardiogram, or ECG. An ECG (a test that records the electrical activity of the heart) is performed by placing sticky leads on your chest connected by wires to a monitor. The monitor records the electrical activity of your heart and prints it out on paper, creating the ECG.

Some people are only in atrial fibrillation for short periods of time and then go back into the normal heart rhythm. For these people, it may be difficult to capture atrial fibrillation on an ECG.

This is because an ECG is like a snapshot in time. It shows us exactly what your heart's electrical activity is doing the moment it is taken, but not before or after. For this subset of patients, it may be beneficial to wear (or have implanted) a heart monitor that constantly records the heart rhythm to capture any abnormalities over a period of time.

Today, there are even inexpensive, small heart monitors that patients can purchase and use with a smartphone to record their heart rhythm at any time. The doctor will determine the best way to diagnose abnormal heart rhythms for each patient.



Why Do I Have Atrial Fibrillation?

The following factors are associated with an increased likelihood that a patient will develop atrial fibrillation:

- Age – incidence increases with age
- Sex – slightly more common in men than in women
- High blood pressure
- History of a heart attack
- Heart valve problems
- Anatomical heart problems that occurred at birth
- Sleep apnea – the risk is significantly lower if the sleep apnea is treated with a CPAP, or breathing machine, at night
- Obesity – weight loss is associated with reduction in the incidence of atrial fibrillation
- Very often the cause is unknown

Treatment Options

Treatment for atrial fibrillation, if indicated, includes both medical and procedural options. Medications can be used to prevent stroke, slow the heart rate and keep the heart in a normal rhythm. Procedures to treat AFib include ablation, which can prevent the abnormal electrical signals that cause atrial fibrillation from moving through your heart, as well as placement of a device to close off the left atrial appendage, reducing stroke risk. Treatment options will be further reviewed in the next newsletter.



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