

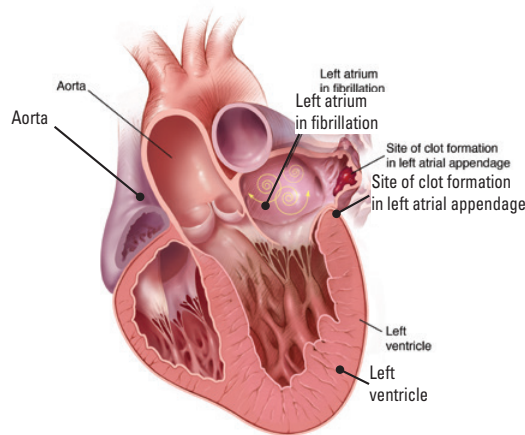
# What Everyone Needs To Know About Atrial Fibrillation & Stroke

*Stroke. Are you at risk?*





Increase your knowledge.  
Understand your risk for stroke.



## *What is Atrial Fibrillation?*

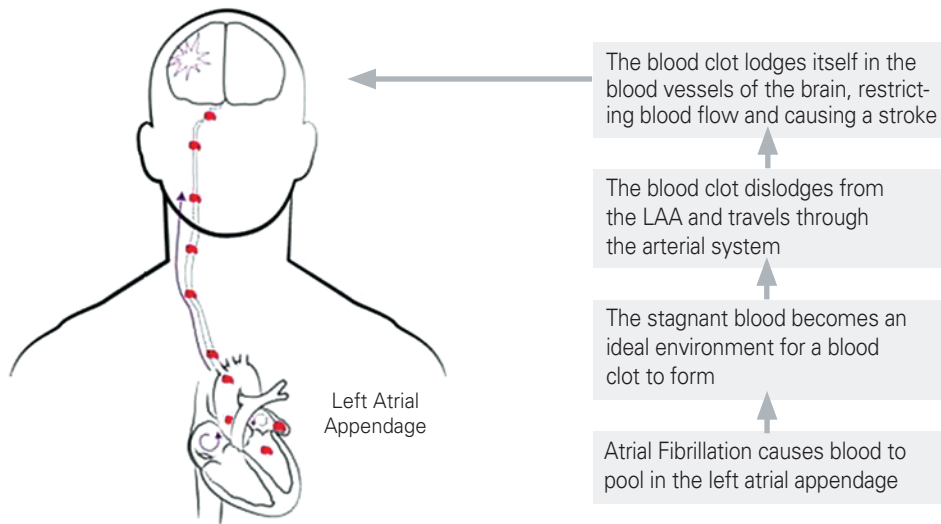
Atrial fibrillation (AF) is a heart condition where the upper chambers of your heart (atria) beat too fast and with chaotic rhythm (fibrillation).

This condition can cause blood to pool and form clots in an area of your heart called the left atrial appendage (LAA). If a blood clot forms, it can travel through an artery to the brain and cause a stroke.

## *Did you know?*

People with untreated AF may be at greater risk for stroke than people with normal heart rhythms.<sup>1</sup>

- About one third of people with atrial fibrillation will have a stroke<sup>2</sup>
- AF-related strokes are more frequently fatal and disabling<sup>3,4</sup>
- In non-valvular AF, the left atrial appendage (LAA), a small pouch on the top of the heart, is believed to be the source of a majority of stroke-causing blood clots<sup>5</sup>



## *How can you tell if you are at risk for stroke?*

Anyone can have a stroke no matter your age, race, or gender. But the chances of having a stroke increase if you have certain risk factors:

- Atrial fibrillation (AF)
- Coronary artery disease
- Diabetes
- High blood pressure
- High cholesterol
- Sleep Apnea

*Anyone can have a stroke no matter your age, race, or gender.*



### ***What stroke risks are associated with AF?***

Atrial fibrillation can decrease the heart's pumping efficiency by as much as 30 percent. Poor pumping increases the risk of clots forming in the heart chambers. Blood clots can break loose and travel in the blood stream to the brain, lungs, and other parts of the body.

Stroke is the most common and perhaps the most feared complication of AF.<sup>1</sup>

Risk of Stroke without AF



**< 5 X**

Risk of Stroke with AF



*AF patients have a 5 times greater risk of stroke.<sup>1</sup>*

### ***What are the symptoms of stroke?***

Signs of a stroke may include:

- Sudden numbness or weakness of the face, arm, or leg (especially on one side of the body)
- Sudden confusion, trouble speaking or understanding speech
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance, or coordination
- Sudden severe headache with no known cause



*Stroke is the most common and perhaps the most feared complication of AF.<sup>1</sup>*

### ***How can you reduce your risk of stroke?***

Today, a number of treatments are available to protect you from stroke or related complications from blood clots. Your doctor will help you choose a treatment based on your heart's rhythm, your symptoms, your stroke risk, and any other medical conditions you may have.

### **Anticoagulants (Blood Thinners)**

Medications can reduce the risk of blood clots that could lead to stroke.

- Anti-platelet medicines, including aspirin, keep platelets in the blood from sticking together and forming clots
- Anti-clotting medicines, such as warfarin (Coumadin®), also help prevent clots from forming in your blood

Blood thinners such as warfarin have been available for more than 50 years to reduce the risk of stroke in people with AF and work well for many patients. However, there are reasons why some patients do not take blood thinners even though they are able to.

Ask your doctor about WATCHMAN, an implant alternative for AF stroke risk.

## The WATCHMAN LAAC Implant

For those patients considered suitable for warfarin by their physicians but have reason to seek an alternative, the WATCHMAN Left Atrial Appendage Closure (LAAC) Device is an implant-based alternative to warfarin.

The WATCHMAN™ Device is implanted in the left atrial appendage of your heart to permanently close off this small pouch and keep harmful blood clots from entering your bloodstream.

By closing off the left atrial appendage, the source of more than 90% of stroke-causing blood clots that come from the heart in people with non-valvular AF<sup>5</sup>, the risk of stroke may be reduced and, over time, you may be able to stop taking warfarin.

## *What is the WATCHMAN LAAC Implant?*

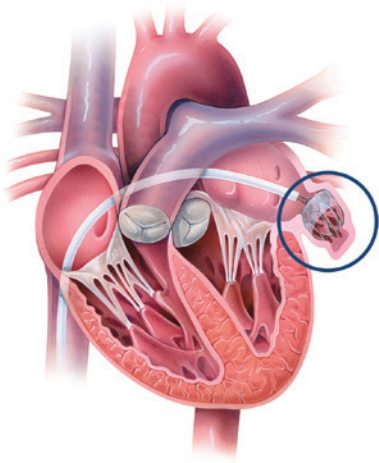
The WATCHMAN Implant is designed to keep harmful blood clots from entering your blood stream, potentially causing a stroke. It is made of materials that are common to many medical devices, is about the size of a quarter and cannot be seen outside the body.



## WATCHMAN Clinical

### WATCHMAN Clinical Program

The WATCHMAN Implant was studied in two randomized clinical trials and several clinical registries that include more than 2,400 patients. The WATCHMAN Implant has been approved in Europe since 2005 and is FDA-approved in the United States. It has been implanted in more than 10,000 patients and is approved in more than 70 countries around the world.



### *How is the WATCHMAN Device Implanted?*

A WATCHMAN Implant is a one-time implant typically performed under general anesthesia. Similar to a stent procedure, your doctor will guide the WATCHMAN Implant into your heart through a flexible tube (catheter) inserted through a vein in your upper leg. The implant does not require open heart surgery and does not need to be replaced.

Your doctor will cross from the right side of the heart to the left side of the heart. Once the position is confirmed, your doctor will release the implant to leave it permanently fixed in your heart. You would then need to stay in the hospital overnight and recovery typically takes about twenty-four hours. After a few months, you may be able to stop taking warfarin.

### *Here are a few questions you can ask your doctor:*

- What is the cause of my atrial fibrillation?
- What is my risk of having a stroke?
- What kind of tests will I need?
- What treatment options can help reduce my stroke risk?
- What medicines should I take to control my heart rate?
- Do I need blood thinners to avoid a stroke? What kind (e.g.aspirin, warfin)?
- What are some of the possible risks and side effects of these treatment options?
- Since I am at greater risk of stroke because I have atrial fibrillation, what should I do to reduce my risk?
- What is the long term effect of AF on my heart?

List all prescriptions and non-prescriptions medications, as well as vitamins and herbal supplements.  
My symptoms and concerns since the last visit to my doctor (list any new, or continuing, symptoms).

## **Program**

Ask your doctor for more information on WATCHMAN's clinical trial results.

### *Every person with atrial fibrillation has different needs.*

If you've been diagnosed with AF, talk with your doctor about treatment options available to you. Your doctor will help you understand the risks associated with each option.

Together you can choose the treatment that is right for you.

For those patients considered suitable for warfarin by their physicians but have reason to seek an alternative, the WATCHMAN LAAC Device is an implant-based alternative to warfin.

Visit [watchmanimplant.com](http://watchmanimplant.com) - for more information on atrial fibrillation, stroke risk and the WATCHMAN Implant.

#### WATCHMAN™ Left Atrial Appendage Closure Device from Boston Scientific

The WATCHMAN Device is a permanent implant designed to close the left atrial appendage in the heart in an effort to reduce the risk of stroke. With all medical procedures there are risks associated with the implant procedure and the use of the device. The risks include but are not limited to accidental heart puncture, air embolism, allergic reaction, anemia, anesthesia risks, arrhythmias, AV (Arteriovenous) fistula, bleeding or throat pain from the TEE (Trans Esophageal Echo) probe, blood clot or air bubbles in the lungs or other organs, bruising at the catheter insertion site, clot formation on the WATCHMAN™ Closure Device, cranial bleed, excessive bleeding, gastrointestinal bleeding, groin puncture bleed, hypotension, infection/pneumonia, pneumothorax, pulmonary edema, pulmonary vein obstruction, renal failure, stroke, thrombosis and transient ischemic attack. In rare cases death can occur. Be sure to talk with your doctor so that you thoroughly understand all of the risks and benefits associated with the implantation of the WATCHMAN Device.

#### Sources:

- 1Holmes D. Atrial Fibrillation and Stroke Management: Present and Future. Semin Neurol 2010, 30:528-536.
- 2Brass L. Stroke. Yale University School of Medical Heart Book.
- 3McGrath ER, Neurology. 2013
- 4Tu HT, Int J Stroke. 2013
- 5Blackshear J. and Odell J., Annals of Thoracic Surgery. 1996;61:755-759.

## Van Crisco, M.D., FACC, FSCAI - Interventional Cardiologist



### Training

- Interventional Cardiology Fellowship: Andreas Gruentzig Cardiovascular Center, Emory University Cardiology
- Clinical Cardiology and Basic Science Fellowships: Emory University Cardiology
- Internal Medicine Residency: University of Michigan
- Medical School: University of North Carolina - Chapel Hill School of Medicine
- Undergraduate Degree: Wake Forest University, BS Chemistry

### Areas of Interest

- Acute myocardial infarction and complex coronary artery intervention
- Radial artery access for catheterization and intervention
- Structural Heart Disease including Transcatheter Aortic Valve Replacement (TAVR)
- Endovascular peripheral arterial disease management, including aortic aneurysm, carotid artery, and complex peripheral intervention

### Personal

- Actively involved in clinical trials for cardiac devices, drug therapies, and patient management strategies, Medical Director Sarah Cannon CV Research Institute, Memorial Hospital Jacksonville.
- Medical Director, First Coast Heart and Vascular Cardiac and Endovascular Lab, Old St. Augustine Road, Jacksonville, FL
- On Staff: Baptist Medical Center, St. Vincent's Medical Center, Memorial Hospital Jacksonville, Orange Park Medical Center, Flagler Hospital
- Holds patents on cardiac devices and drug management systems