# AFib Development and Progression

by PATRICIA BRATIANU

## How Atrial Fibrillation Develops and Progresses

Atrial fibrillation is one of the most common heart rhythm disturbances. In the U.S.A. it is responsible for one third of hospitalizations due to an abnormal heartbeat, and half of people aged 80 and older who are hospitalized each year due to an abnormal heartbeat pattern have AFib.

### What Causes AFib?

AFib occurs as a result of irritation within the upper chambers of the heart (atria) and pulmonary vein. Sources of irritation include scars, stretching of tissues, and inflammation. These may be the result of a heart attack, infection, or other cardiac problems.

Often an exact cause is not identified.

### Who is Most Likely to Develop AFib?

Women are slightly more likely than men to be diagnosed with AFib, but men have a higher incidence of hospitalization.

Only one percent of adults 60 and younger are diagnosed with AFib. That rises to about 10% in people over the age of 80.

Caucasians are more likely to develop AFib than people of other ethnicities.

### Are There Different Kinds of AFib?

There are several classifications of AFib.

AFib with RVR (rapid ventricular response) is more serious. It means that your entire heart is beating faster than it should be and so your heart does not have time to empty and fill with blood properly.

This may result in less oxygen being available throughout your entire body. You may feel dizzy, experience chest pain, have shortness of breath, anxiety, or become disoriented. If it continues for an extended period of time, your heart may be damaged.

AFib is also classified by how long a person experiences it. If you have your first episode of AF and it lasts for less than one week, it is classified as paroxysmal AFib. Most of the time, this type of AFib corrects itself within 24 hours. In one out of five people it may persist and become persistent or permanent.

AFib that lasts longer than one week but less than one month is called recent-onset AFib. Persistent AFib is

continuous and lasts for more than one week. Chronic AF lasts longer than one month.

If AFib lasts for more than six months it is usually harder to treat. It may go away, only to return. If heart disease is present cardioversion – a procedure used to shock the abnormal heart rhythm back into a normal one – is less likely to be successful.

Longstanding, persistent AFib lasts for more than one year. Permanent AFib is longstanding persistent AFib that is no longer being treated and does not respond to treatment.

Secondary AFib results from a separate health issue, such as a pulmonary embolism or heart attack. Once the underlying cause of the primary health issue is resolved, the AFib usually disappears.

### How Can AFib Progress If Untreated?

Other types of tachycardias –fast heartbeats – may develop as a result of AFib. These can lead to heart damage. Congestive heart failure may occur. Large scale, long-term research studies have proven that AFib is associated with higher rates of heart failure and death.

*Next page: the risk of blood clots, and preventing AFib progression and complications.*

### AFib and Blood Clots

When AFib occurs, blood clots may form. Blood clots formed as a result of AFib can damage the lungs, brain, and other parts of the body. AFib is responsible for one out of five blood clot-caused strokes.

People who have had one short episode of AFib have a risk of stroke similar to individuals who have never had AFib. If AFib is accompanied by damage to the valves within the heart, the risk of stroke increases by 17 times when compared to similar populations.

People who have AF and suffer a stroke due to a clot are twice as likely to die as opposed to victims who do not have a history of AF. Among stroke survivors who have AFib, the chance of having additional strokes and poorer outcomes is greater than the rest of the population. Complication rates increase with age.

### Preventing Progression and Complications

Management of AFib focuses on three areas. These include controlling how fast the heart beats, restoring a normal rhythm, and preventing blood clot formation.

AFib results in a very fast heart rate. One goal is to slow down the contractions of the heart in order for the organ to rest and effectively pump blood throughout the body. This is often accomplished with medications classified as beta blockers. Some commonly used beta blockers include metoprolol, atenolol, propranolol, and sotalol.

Converting the heartbeat to a normal pattern may require treatment with medication or cardioversion. Beta blocking medications may help to maintain a healthy rhythm. Other cardiac medications, called ACE inhibitors, are often prescribed as well.

If you are maintaining adequate circulation and are not in acute distress, cardioversion may be planned and carried out if medications are ineffective. However, if the heart is showing signs of damage and circulation is poor, emergency treatment with cardioversion is necessary.

Other AFib treatments include a procedure called ablation, and placing a pacemaker.

Most people who have AF are also treated with anticoagulants, medications that “thin” the blood, to prevent clots. Health care providers select drugs to use based upon an array of factors. They weigh the risk of bleeding from the

medications with the risk of stroke occurring. Common medications used to prevent blood clots include warfarin and heparin.

### When to See a Cardiologist

While AFib may be managed by a general practitioner, I recommend that anyone who has a history of AFib consult with a cardiologist. It is especially important to consult a cardiologist if your pulse rate remains high or if paroxysmal AFib is frequent. If you have had a heart attack or heart failure, a cardiologist must be consulted.

A cardiology consult should also be sought for guidance regarding cardioversion and long term management of AFib, and a complete cardiac workup must be obtained in order to rule out other heart problems.

### Living with AFib

Most people who have a diagnosis of AFib are able to lead healthy, normal lives. Seeing a health care provider and getting prescribed tests helps to prevent the condition from progressing to serious ills.

Managing stress and avoiding excess caffeine may reduce the likelihood of AFib occurring. It is important to take precautions that reduce the chances of bleeding from anticoagulant medications. Live a heart healthy lifestyle by eating a healthy diet, not smoking and getting regular exercise if your doctor approves.

Seek immediate medical treatment if you experience AFib dizziness, shortness of breath, or chest pain occurs. Learn the signs and symptoms of stroke and if you experience any of them, call emergency medical services immediately. By taking these steps, life with AFib is very manageable and life can be sweet.