Making the Afib-Stroke Connection

Understanding the association between atrial fibrillation (Afib) and the increased risk of stroke.

National Stroke Association’s mission is to reduce the incidence and impact of stroke by developing compelling education and programs focused on prevention, treatment, rehabilitation and support for all impacted by stroke.

A stroke is a brain attack that occurs when a blood clot blocks an artery or a blood vessel breaks, interrupting blood flow to an area of the brain. Brain cells begin to die.

Call 9-1-1 immediately if you see one or more signs of a stroke.

1-800-STROKES (787-6537)

www.stroke.org/afib-stroke

Sponsored by Boehringer Ingelheim Pharmaceuticals, Inc.

All publications are reviewed by National Stroke Association’s Publications Committee.

© 2012 National Stroke Association

4/12 BG12
As someone diagnosed with Afib, it’s important to understand not only your condition, but also the associated risks. This brochure has been designed to help you:

- Understand what Afib is
- Learn about the associated increased risk of stroke with Afib
- Make medication treatment decisions with your healthcare professional
- Discuss Afib with your family and friends

What is Afib and how does it relate to stroke?
Afib is a type of irregular heartbeat. It is caused when the two upper chambers of the heart (atria) beat unpredictably and sometimes rapidly.

Who is most likely to have Afib?
You are not alone. An estimated 2.2 million people are diagnosed with Afib. While it can occur at any age, Afib is more common in older people. About 5 percent of people 65 years and older and one in every 20 people over 70 have Afib. Afib is more common in people with high blood pressure, heart disease or lung disease.

What are the symptoms?
Often, Afib has no visible symptoms. Some people with Afib describe fluttering, racing or pounding sensations in their chests. Others may experience episodes of dizziness, fainting or light headedness. Anyone with these symptoms should visit a healthcare professional to be evaluated for Afib.
Understanding a stroke
When you have Afib, blood pools in the atria of the heart and clots may form [Figure 1]. These clots may then be carried to the brain, causing a stroke [Figures 2-3]. With proper preventive treatment, stroke may be avoided.

Afib-related stroke
Afib is a major risk factor for stroke. A person with Afib is **five times more likely** than a person without Afib to have a stroke. However, people who have been diagnosed with Afib have already taken the first step to prevent an Afib-related stroke. Sixty to 80 percent of strokes in people with Afib can be prevented. Therefore, it is important to understand stroke symptoms, what to do if you have stroke symptoms and available treatments to control Afib.
Afib Treatments to Help Prevent Stroke

Common medications

A goal for treating Afib may be to restore the normal, regular rhythm of the heart to help prevent a stroke. Often, this can be done with medications or the use of electrical stimulation (a procedure called “cardioversion”). Afib treatment may also concentrate on protecting against blood clots that travel from the heart to the brain and cause strokes.

Blood-thinning medications—known as anticoagulants—can greatly reduce stroke risk if taken properly. They work by preventing blood clots from forming and can reduce the risk of first stroke in Afib patients by 60 to 80 percent.

While most Afib-related strokes can be prevented with anticoagulants, it is estimated that more than half of Afib patients may not be prescribed these medications. There are several reasons why these medications are not prescribed, including:

• interactions with other drugs and diet (e.g., foods such as green leafy vegetables containing vitamin K);
• the necessity for frequent blood tests and monitoring; and
• concerns about risk of bleeding.

Talk to your healthcare professional about whether anticoagulants are right for you.

Medications—risks and rewards

There are several clot-preventing medications available, including aspirin, warfarin sodium and new drugs called direct thrombin inhibitors or anti-Xa inhibitors. People who take warfarin must be regularly monitored with a blood test called the International Normalized Ratio (INR).

• If the INR is too low, blood clots may not be prevented and the risk of stroke is increased.

• If the INR is too high, there may be an increased risk of bleeding.

The newer anticoagulants (Pradaxa® [dabigatran] and Xarelto® [rivaroxaban]) do not require routine blood testing. These drugs generally do not have dietary restrictions, but are not for all people with Afib.

Medications that prevent blood clots are recommended when the benefit is greater than the risk. Your healthcare professional will help you weigh the pros and cons of taking an anticoagulant and decide which one to take. Make the decision together.

Talk with your healthcare professional about what medications may be right for you and your Afib.
Your emotional health
As a person diagnosed with Afib, you may feel overwhelmed, anxious and afraid. It is normal to have feelings of worry or fear. Fortunately, there are things you can do to help:

- **Talk with your healthcare professional**—This is part of your complete care.
- **Schedule relaxation time**—Pleasant activities may help you feel like your normal self.
- **Exercise**—Exercise, if approved by your healthcare professional, may help you maintain a positive, upbeat mood.

Communication with family and friends
Talking with your loved ones about Afib may be difficult. However, there are some important things that you and your loved ones should all have access to, for both your safety and peace of mind:

- **Medication list** (all medications and doses)
- **List of healthcare professionals** (names, phone numbers, office locations and specialties)
- **Healthcare appointment schedule**

Learn the warning signs of a stroke. You, your family and your friends should be able to recognize the signs of a stroke, as described on the following pages.

Also, it is important that you ask for help when needed. Here are a few questions you can ask your loved ones to get the discussion going:

- I’m feeling overwhelmed—can you help me talk through my concerns?
- Can you help me make follow-up appointments with my healthcare professionals?
- Can you come with me to my follow-up appointments? It will help me remember what was discussed.
Learn the many warning signs of a stroke. Act FAST and CALL 9-1-1 IMMEDIATELY at any sign of a stroke. Use FAST to remember warning signs:

**FACE:** Ask the person to smile. Does one side of the face droop?

**ARMS:** Ask the person to raise both arms. Does one arm drift downward?

**SPEECH:** Ask the person to repeat a simple phrase. Is their speech slurred or strange?

**TIME:** If you observe any of these signs, call 9-1-1 immediately.

---

**NOTE THE TIME WHEN ANY SYMPTOMS FIRST APPEAR.** If given within three hours of the first symptom, there is an FDA-approved clot-buster medication that may reduce long-term disability for the most common type of stroke.

**LEARN ABOUT MORE SUDDEN SIGNS OF STROKE AT** www.stroke.org/symp

---

**Monitor Your Stroke Risk**

Because you have atrial fibrillation (Afib), your risk of stroke is increased by at least five times. Bring this card with you to each healthcare appointment. Mark the appointment date and fill out the notes portion with your healthcare professional to manage your risk of stroke.