What is Atrial Fibrillation?

Atrial fibrillation is also called AFib or AF. It is the most common abnormal heart rhythm, and affects about 350,000 Canadians.

With AFib, electrical signals in the heart can become fast and disorganized. They cause part of the heart to "fibrillate," or in other words, to contract very quickly and at irregular intervals. These quick, irregular contractions don't work well to push blood from one part of the heart to the other. When the blood isn't flowing well it can pool and form clots. In some people, AFib can cause symptoms (signs of the disease) to appear. But many people with AFib will find that they do not have any symptoms.

Most people with AFib will need to take medication every day that helps to prevent blood clots from forming. The type of drug taken is called an anticoagulant drug.

What Are My Medication Options?

1. The recommended first choice for preventing stroke in patients with AFib is warfarin.

Warfarin (Coumadin) has been used for more than 60 years. It is proven to be effective, but you must take just the right amount of the medication for you. To make sure you are taking the right dose, regular blood tests will be needed to monitor your International Normalized Ratio (INR). This is a test that helps your doctor or health care provider adjust your warfarin dose.

- Too little warfarin (low INR) puts you at risk of stroke or other blood clots.
- Too much warfarin (high INR) puts you at risk of bleeding.

The correct range in the middle is called the “therapeutic range.” This is an INR of 2.0 to 3.0 for most people with AFib.

2. New oral anticoagulants are another option for patients with AFib if they are not doing well on warfarin.

In Canada, these include dabigatran (Pradaxa), rivaroxaban (Xarelto), and apixaban (Eliquis). If you are prescribed a new oral anticoagulant, your liver and kidney function must be monitored before your first dose, and then at least once a year. You will take the same amount of drug each day — there is no test that checks levels of the new oral anticoagulants and there is no adjustment or personalization of the dose.

3. Another type of medication called antiplatelet drugs is sometimes used to prevent stroke in patients with AFib.

However, antiplatelet drugs don’t work as well as anticoagulant drugs, and they have the same or higher risk of bleeding. Antiplatelet drugs include acetylsalicylic acid (ASA, Aspirin) and clopidogrel (Plavix).

Common Symptoms of AFib:

- irregular and fast heartbeat
- heart palpitations
- chest discomfort
- shortness of breath
- fatigue
- dizziness, sweating, or nausea
- light-headedness.

How Can Atrial Fibrillation Lead to a Stroke?

AFib can cause blood to pool in the heart. This pooling can cause blood clots to form. If a clot breaks away from the heart, it can travel to the brain, blocking blood flow and causing a stroke. Stroke is a major complication of AFib. In fact, people with AFib are 3 to 5 times more likely to have a stroke.

How Can I Prevent a Stroke if I Have Atrial Fibrillation?

Your risk of stroke depends on many factors, in addition to your AFib. Your doctor or health care provider will determine your stroke risk. He or she will work with you to choose the stroke prevention approach that is best for you.

Your Risk of Stroke Increases if You Have:

- congestive heart failure
- high blood pressure
- diabetes
- had a stroke or mini-stroke (TIA) before
- or if you are 75 years or older.
What Are the Side Effects of These Medications?

A side effect of all anticoagulants is a higher risk of bleeding. This is because these medicines increase the time it takes to form blood clots. If blood clots don’t form when they should, you can experience bleeding.

Symptoms of Bleeding May Include:
- nose bleeds
- increased bruising
- bleeding from the gums when brushing your teeth
- red or dark brown urine
- red or black stools
- coughing or vomiting blood-stained fluid
- severe headache.

Report any of these symptoms to your doctor or health care provider. If you have bleeding that you cannot control, seek urgent medical care.

What Else Do I Need to Know?

Before prescribing anticoagulant medication, and from time to time while taking the medication, your doctor or health care provider will determine whether your risk of bleeding is greater than your risk of stroke.

Your Bleeding Risk is Higher if:
- you have had a stroke
- you have high blood pressure
- your kidneys or liver aren’t working as well as they should
- you already have bleeding problems
- your INRs aren’t well controlled on warfarin
- you are older than 65 years old
- you take medicine that increases your bleeding risk
- you drink more than 8 alcohol beverages a week.

In general, people with a high risk for bleeding need to be monitored more closely when taking anticoagulants. Your doctor or other health care providers will decide how often you are seen and monitored.

If you experience a serious bleed while on warfarin, vitamin K is an antidote (reversal agent) that can be given to help stop the bleeding. No antidotes are available at this time for the new oral anticoagulants. If this is of concern, please talk to your doctor or health care provider.

And a Few Helpful Tips:
- Avoid smoking.
- Limit the amount of alcohol you drink.
- Floss gently and use a soft-bristled toothbrush to prevent bleeding from your gums.
- Protect yourself from cuts by using an electric shaver and wearing gloves while gardening.
- Foods that contain vitamin K can affect the warfarin concentration in your blood. If you are taking warfarin, eat your usual diet, but try to keep it consistent. Avoid large day-to-day changes in foods that are high in vitamin K such as green leafy vegetables.
- The new oral anticoagulants are quickly broken down by your body. It is unknown if missing a dose increases your risk of stroke, so it is important to take your medication on time and as prescribed.
- If you see a new doctor for any reason or are scheduled for any medical or surgical procedures, tell the doctor or health care provider that you are on an anticoagulant.
- Tell your dentist that you are on an anticoagulant before any dental cleanings or procedures.
- Anticoagulants interact with many other common drugs. Always talk to your doctor or pharmacist before taking any other medications including prescription, non-prescription, or over-the-counter medications, or natural health products such as vitamins or supplements.

How Do I know If I Am Having a Stroke?

You, your friends, and your family should know the five S’s so that you can recognize the signs of a stroke and respond quickly.

The Five S’s of Stroke:
- Sudden numbness or weakness of the face, arm, or leg
- Sudden trouble speaking, understanding, or confusion
- Sudden vision problems
- Sudden trouble walking; loss of balance or coordination
- Sudden severe headache with no known cause

Call 9-1-1 immediately if you have any of these symptoms.

Where Can I Get More Information?

To learn more about atrial fibrillation and stroke visit:
- Canadian Heart and Stroke Foundation (http://bit.ly/1aYJlFx)
- Canadian Agency for Drugs and Technologies in Health (www.cadth.ca/clots).

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