Title: Preventing Stroke in Patients with Atrial Fibrillation

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Plain Language Summary:

What is atrial fibrillation?
Atrial fibrillation (AF) is an irregular and often fast heartbeat. Many people with AF do not have symptoms. Other people may feel:
- Racing heartbeat
- Trouble breathing
- Difficulty exercising
- Dizziness or fainting
- Chest pain

Patients with AF have a higher risk of heart attack, heart failure and stroke.

How does atrial fibrillation increase my risk of stroke?
In AF the four chambers of the heart do not beat together and blood can pool and form clots in the upper chambers. Clots from the heart can break off and travel through the blood vessels to the brain where they block blood flow causing a stroke. This type of stroke is called an ischemic stroke and may result in permanent brain damage. If you have AF your chances of having a stroke are higher if you are over 75 years old or have:
- High blood pressure
- Diabetes
- Heart failure
- Previous stroke (even a minor stroke)

How do I lower my risk for stroke if I have atrial fibrillation?
In patients with AF preventing blood clots from forming in the heart decreases the chance of stroke. There are two types of medicines that can help thin the blood and prevent clot clots from forming.
- **Anticoagulants** – block reactions in your body and increase the time it takes to form a blood clot. Example: Warfarin (Coumadin® or Jantoven®)
- **Antiplatelet medicines** - prevent blood cells called platelets from clumping together to form a blood clot. Examples: aspirin and clopidogrel (Plavix®)

How do I know which medicine is right for me?
- **Warfarin** is used to prevent stroke in most patients with AF. The most serious side effect is bleeding into the brain. However, the lower risk of stroke is more important than the small risk of bleeding for most people. Warfarin requires frequent blood tests to make sure that you are taking the right amount of medicine.
- **Aspirin** is used to prevent strokes in patients with AF who are young and have a low risk of stroke. Bleeding problems are very rare when taking aspirin alone.
- **Aspirin and Clopidogrel** are taken together to prevent strokes in patients with AF who cannot take warfarin. These two medicines are better than aspirin alone at preventing strokes. The risk of bleeding problems is higher than it is for aspirin. However, the slightly lower risk of stroke may be more important to some patients.

- **Dabigatran, Apixaban, and Rivaroxaban** are new medicines that work as well as warfarin in preventing stroke, cause less bleeding and do not require frequent blood tests. These medications have not been studied as much as warfarin and are still very expensive.

All patients with AF should talk their doctor about the best medicines to help decrease risk of stroke and avoid bleeding problems.

**Additional Resources:**

**MedlinePlus: Atrial Fibrillation**

**MayoClinic: Atrial Fibrillation**
http://www.mayoclinic.com/health/atrial-fibrillation/DS00291

**Family Doctor: Stroke**

**National Institute of Neurological Disorders and Stroke Information**
Office Phone: 301-496-5751
Web: www.ninds.nih.gov

**American Heart Association: What Are Anticoagulants and Antiplatelet Agents?**
http://www.heart.org/idc/groups/heartpublic/@wcm/@hcm/documents/downloadable/ucm_300338.pdf

**Key Words:**
Atrial fibrillation
Stroke prevention
Warfarin
Aspirin
Clopidogrel

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