

Title: Stroke or TIA prevention in the setting of new onset atrial fibrillation.

Author: Maria K. Surowiecka, MS IV

Date: October 5, 2009

Key words: Atrial Fibrillation, Stroke, TIA, Anticoagulation, Warfarin, Aspirin

Abstract: Atrial fibrillation is an irregular heartbeat that can lead to blood clots in the heart. These clots can dislodge and travel to the brain, resulting in stroke and possible death. This pamphlet describes how patients with atrial fibrillation, especially those with a prior history of stroke or mini-stroke (TIA), should be on anticoagulation medication with warfarin to prevent clot formation.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

Stroke and TIA Prevention in Patients with Atrial Fibrillation

University of Minnesota Primary Care Clerkship Patient Education Tool

By: Maria K. Surowiecka, MS IV



What is atrial fibrillation?

Atrial fibrillation is an irregular heartbeat that can often be found when someone takes your pulse and notes that your heartbeats do not occur at regular intervals. You may also feel that your heart is suddenly beating funny, or you may feel it racing.

Atrial fibrillation occurs when the two upper chambers of the heart (atria) beat rapidly and unpredictably. This irregular heartbeat can occur in episodes lasting from minutes to hours, or it can become a chronic condition.

Atrial fibrillation increases the risk of stroke up to 6 times. Stroke occurs because the irregular heart beat allows blood to pool in the heart. When blood accumulates in the heart it has a greater tendency to form clots, and these clots can then travel to the brain resulting in stroke.

What is a stroke?

A stroke occurs when a blood clot blocks a vessel that carries blood to a specific area of the brain. As a result, cells in this area of the brain die and brain damage occurs. This damaged part of the brain loses the abilities it used to be responsible for. This includes memory, speech, movement, etc. The larger the stroke, the more brain area is damaged, and the greater the resulting loss of normal function.



What are symptoms of stroke?

Symptoms include:

- Sudden numbness or weakness in a body part, sometimes involving the whole left or right side of the body.
- Sudden change in vision.
- Sudden headache.
- Sudden inability to concentrate, speak, or understand what is being said.
- Sudden loss of balance or coordination.

How can patients with atrial fibrillation reduce their risk of stroke?

Patients with atrial fibrillation should be placed on blood thinner medication to prevent their risk of clotting. The most effective blood thinner to date is a medication called warfarin. There is an increased risk of bleeding complication with this medication, and patients with atrial fibrillation should be evaluated by their physician to determine if they are appropriate candidates for this therapy.



Is aspirin just as effective as warfarin?

Anticoagulation with warfarin has been shown to be significantly more effective than aspirin at reducing risk of stroke in patients with atrial fibrillation. This is especially true for patients with prior stroke or TIA. However the risk-benefit ratio is different for each patient and should be considered on an individual basis to assess who will benefit most.



What other resources are available for patients regarding atrial fibrillation and stroke prevention?

- National Stroke Association: www.stroke.org
- American Heart Association Stroke Connection "warmline": www.americanheart.org
- Information on oral anticoagulants: www.coumadin.com ; www.warfarin.com