## **Atrial Firbrillation**

This is a condition where the top two of the four chambers of the heart (atria) "fibrillates" in an irregular pattern. Instead of "pumping" the atria wiggles around like a bag of worms. Blood inside the atria swishes around before being expelled into the bigger chambers of the heart (ventricles).

Because the atria functions mainly as a storage area prior to the blood being sent to the more important ventricles, malfunctioning of the atria is not considered the worst heart condition to have. Younger patients often revert back to normal rhythm. Sometimes the doctor will electrically shock the heart back into regular rhythm. Most of the time, however, the condition is treated with medications to keep the heart from beating too fast and with blood thinners.

The irregular beating of the atria sends irregular signals to the Ventricles. The ventricles may respond to the abnormal signals by beating at a rapid rate. When the ventricles beat too fast, blood is not able to be pumped effectively to the brain and to the rest of the body causing you to feel tired and faint. Medications are given to prevent this from happening.

The biggest risk of having atrial fibrillation is the risk of a stroke. When the blood is "swishing around" in the atrium, small clots can form. If these clots go to the brain, a stroke will result. This is why patients with atrial fibrillation are put on blood thinners. The most common medication used for this purpose is warfarin (brand name Coumadin). Other medications with blood thinning properties such as aspirin and Plavix have not been shown to be effective in preventing stoke in atrial fibrillation patients. Heparin and low molecular weight heparin are also effective but have to be given by injection.

Although, not everybody with atrial fibrillation will get a stroke, the chances are much less with the blood thinners. You must weigh the risk of the blood thinner with the risk of stroke.

The most serious risk of being on blood thinners is the risk of bleeding. Bleeding in the brain is the most serious risk because there is nowhere for the blood to go. Precautions must be taken to avoid head injuries in patients taking warfarin. The other serious risk is the risk of internal bleeding. People who have ulcers or take medications that can cause ulcers must talk to their doctor and weigh the risk of internal bleeding against the risk of stroke.

Although you may have prolonged bleeding after cutting yourself shaving or having a tooth extracted, it is very rare for this kind of bleeding to be life threatening, even if you are on warfarin.

The blood must be monitored regularly to make sure the blood is not too thin or not thin enough. A blood test called the "INR" is used to measure the thinness of the blood. We want to keep the INR level between 2 and 3. This should be checked every 1-2 months (more frequent monitoring may be necessary until the level is stabilized).