Is Atrial Fibrillation Hereditary?

by BRENDA VANTA

Does Atrial Fibrillation Run in the Family?

Scientists believe there is a genetic component in the development for Afib, and more and more studies are confirming this hypothesis. We know now that having family history of Afib increases your chances to develop this condition as well. To be more specific, if you have an immediate family member with Afib you have a 40% increased risk developing Afib as well. In addition, the younger and healthier a family member is when this condition is diagnosed, the greater is the risk for other family members to suffer from the same condition – for example if you have a sibling diagnosed with Afib in the 30s, the risk for his/her immediate family members is twofold.

The genes involved

In a 2008 study featured in the “New England Journal of Medicine”, researchers indicate they found a gene mutation associated with one family’s heredity form of Afib. This study evaluated a large family that had an inherited form of Afib that affected eleven relatives and five unaffected family members. All the relatives diagnosed with Afib had one genetic problem in common: they shared a mutation in the genes that codes for atrial natruretic peptide (ADP). ADP is involved in regulating the body‘s amount of water, sodium and vascular tone. This study suggests that this mutated gene can affect the heart’s electric properties, leading to Afib. Previous studies found other genes involved in Afib, particularly genes for ion channels that regulate the movement of the potassium and sodium in heart cells.

Are you concerned about Afib?

1. **Talk to your doctor, and investigate if you have this condition.** As you can see above, if you have a family member diagnosed with Afib, you should be even more cautious and take heart symptoms (i.e. palpitations, arrhythmia) more seriously because you are at higher risk to have this condition as well
2. **Predisposition does not equal predestination.** In other words, if you take good care of your health, you may not express those mutated genes and may not develop Afib.

3. **Avoid triggers of Afib.** Besides family history, other risk factors for Afib include cardio vascular conditions (high blood pressure, congestive heart failure, heart attacks, heart surgery), other medical conditions (thyroid problems, sleep apnea, diabetes, some kidney or lung conditions). If you have any of these diseases, talk to your doctor to have them well controlled. Avoid being overweight or obese, drink alcohol in excess, or smoke – these can trigger an Afib episode as well
4. **Don’t smoke.** Follow a heart healthy diet (low in salt, solid fats, and processed foods, high in fresh fruits and vegetables, and whole grains) and a fitness plan – to avoid excessive weight, and keep the blood pressure and cholesterol levels under control. Limit the consumption of alcohol and caffeine
5. **Follow up care.** Take your meds as prescribed and follow up appointments as recommended.
6. **Use over the counter meds only when needed.** Be aware that some of them (i.e. some cold and cough medicines) can trigger an episode of rapid heart beat