

Hot Flashes, Night Sweats and Heart Disease

In the last few years there have been a number of papers that link early onset of significant flashes and markers for heart disease.

A large observational study in Norway showed higher blood pressure, both systolic and diastolic, higher cholesterol, more atherosclerosis and higher insulin resistance that can lead to diabetes in women who have many hot flashes.

Other studies have shown that lower estrogen affects the endothelium of the coronary arteries. That is an extremely important layer of cells that line the arteries.

There is a large study in the USA called the SWAN study- study of women across the nation. It has been going on for decades- they have been following women yearly since they were in their 40s with evaluation of their BP, sugars, estrogen blood levels and measures of cardiac function. They found that those who have HF have 33% higher glucose and insulin resistance than those who have no hot flashes.

At a conference I attended recently, Dr Rebecca Thursten followed 492 women between the ages of 45-58. They did something called brachial artery ultrasound to assess flow mediated dilatation. This is a marker of early atherosclerosis. They also did tomography to measure the calcium in the coronary arteries and the aorta.

If they have frequent HF- “super flashers” they call them-and low estrogen levels, the flow mediated dilatation is lower and they have a 48% greater calcification of the coronary arteries and 55% more calcification on the aortic artery.

We also recognize that certain risk factors like smoking and obesity are risk factors for more VMS and for cardiac disease.

Although we know that there are certain chemicals released by a hot flash, they cannot say that hot flashes cause heart disease, just that they are related.

We do know that if women go through menopause at a younger age, estrogen is helpful in preventing heart disease.

Heart disease is different in women than men. The signs of heart attacks are not typical- in men it is often a crushing chest pain, sweating where in women it may be loss of energy, shortness of breath, nausea. Women present late to get treatment and even if they are admitted to ICU they are more likely to have a sudden death. Instead of developing plaques that narrow off an artery, some women develop disease in that endothelium I was describing and this dissects off causing a sudden blockage in the artery. Women who have microvascular disease –narrowing of tiny vessels have been found to have low estrogen.

Message for today

Our bodies are amazing! They have given us hot flashes as a sign to pay attention to our cardiovascular system. So if you are a “super flasher”, you should not smoke, exercise, keep your weight down, be assessed for prediabetes and have your cholesterol done. Estrogen may play a role in keeping our hearts healthy.