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Women and Vascular Disease -You, Me, Sisters, Moms and Grandmothers By Mrs. Norma Duncan, CFNP

As a nurse practitioner, I see many women as patients. In fact, the great majority of my patients are women. Much of my day is spent treating and monitoring hypertension, hyperlipidemia (high cholesterol) and diabetes in women. I treat a lot of obesity in every age group. I perform at least five complete physicals a day on women. The annual exam is a great time to reflect on family health history. It is uncommon to find that the patient's immediate family history contains breast cancer. It is *common* to find that parents and/or grandparents died or were disabled by strokes, heart attacks, or congestive failure (vascular disease).

Yearly, we screen for breast cancer, if a woman is over forty. Health insurance and federal programs pay for this. Breast cancer is a devastating disease and I am glad that I can screen for it frequently. Yet, the women I see are ten times more likely to die from vascular disease than breast cancer. In the typical woman, her first heart attack is twice as likely to kill her as her male counterpart. One in two of the women I see will eventually die from a heart attack or stroke, while only one out of twenty-five women I see will die from breast cancer.

Protecting my patients from vascular disease is where I need to concentrate my teaching and treatment, without neglected the potential of breast cancer. The hardest part of my job is convincing people that they actually *need* treatment for hypertension and hyperlipidemia (high cholesterol). I almost never treat on a single blood pressure reading, or cholesterol reading. The only exception to this is if the blood pressure is dangerously high or the patient has a family history that indicates death or disability from vascular disease is likely.

There are new guidelines for beginning treatment of blood pressure and cholesterol (lipid) problems. It is a challenge to get a healthy woman who has no symptoms to take a medicine for blood pressure and high blood lipids. Here is an example of my usual way of "selling" these treatments.

"You have high blood pressure"

My Explanation: "I'm looking at the blood pressure diary you brought me. You have hypertension and we need to treat it. Now Susan (not a patient's real name), you know that I don't think of you as being 42 years old (her current age). I am making these treatment suggestions, so that at 70 or 80 you can be tossing your grandkids or great- grandkids around. The heart is just a muscle. High blood pressure makes it work too hard which will make it wear out before it's time. The medicines I will put you on will probably have no side effects. If we wait to treat you, I may have to put you on a 'slammer' drug, or several drugs which

may make you tired. Meanwhile, without medication, your heart has to pump against 'tight pipes' (blood vessels narrowed by muscle contraction in the vessel wall).

If I'm lucky, Susan agrees. But, then I let Sudan know that medication is only part of the effective treatment of blood pressure or elevated cholesterol. In fact, I tell her that lifestyle changes such as good nutrition and daily exercise may either help her get off the drug, or may keep me from having to add additional meds.

The blood pressure diary I referred to is an indispensable tool. I instruct Sudan to bring in 10-15 readings over a 2-3 week period of time to her next office visit. It is her blood pressure diary; it is the "story" of how her body is responding to her diet, her activity and her medication. This allows me to make a good judgment regarding treatment.

The new guidelines for blood pressure are much different than what we used to treat. Today, we want the blood pressure 120/75 or less. We want it even lower if you have diabetes. This change came as the result of researchers finding that those who had blood pressure of 120/75 or less were likely to live longer and healthier. The new meds we use don't make people feel tired. They not only lower the numbers, they also promote blood vessel health. These medicines work at the endothelium, the lining of the blood vessels where all the action takes place in terms of vascular disease. A health endothelium is a good thing to have going for you.

We all have heard the work "dysfunction." It means that something is not working the way it was designed to work. The lining of the blood vessels and particularly the arteries can be "dysfunctional." Scientists call this "endothelial dysfunction," and it is the foundation of vascular disease in the heart, brain, kidneys and legs. Exercise, proper nutrition, proper rest and normal cholesterol promote health vessels and prevent, decrease and often reverse "endothelial dysfunction."

"You need treatment for cholesterol"

Susan has barely gotten use to taking blood pressure medications, when I tell her, "Susan, we have to treat the cholesterol problem. I'm looking at a bad family history for blood vessel disease. Now is the time to stop it, or maybe even *reverse* the process. You know you need to keep the arteries to your heart muscle open and flowing. The same disease affects *all* the blood vessels, the ones to your brain, your kidneys, your feet, and the tiny ones in your eyes".

This is a good deal harder to sell than treatment for high blood pressure. I am always willing to have the patient try lifestyle changes for several months and then retest her lipid levels. I am a friend of fish oil and flaxseed oil, both of which are full of omega 3 fatty acids. They will lower some patient's lipid levels. To be honest though, unless there's a radical

sustained change in exercise and nutrition, I rarely see much change in the levels.

We then prescribe medication. The most likely medication is a statin. These are the drugs that will make a huge change in the statistics for vascular disease. We already see better outcomes than with these drugs. Yet, many refuse to take them. The patient tells me that they are afraid of liver or muscle damage that can hurt the kidney function. These side effects are rare and almost always reversible by simply stopping the medication. To date, there has not been a single documented incidence of liver failure being caused by a statin drug.

I wish that heart attacks and strokes were as rare as the side effects of statin drugs. What is even stranger than the fear of statin drugs is when a cigarette smoker tells me she's afraid of these drugs. Each puff of smoke has over 3,000,000,000 free radicals – these are the byproducts of chemical reactions which are harmful to the body. Cigarette smoking hurts everyone, even those who don't smoke and only live with or around someone who does. Statins do no permanent harm to anyone, but the cigarette smoker is afraid of a statin: Go figure.

When you have bad family history, high blood pressure, and diabetes then it becomes paramount to control all risk factors. Knowing what is abnormal with blood pressure is relatively easy. Lipids are a little more complicated. Here is what you need to know:

- 1. LDL is the abbreviation for low density lipoproteins. This the bad part of the lipid study I do on my patients. If your LDL is high, it places you at great risk of developing heart and vascular disease. A high LDL cholesterol is the main part of the lipid profile that statin drugs can lower effectively.
- 2. HDL is the abbreviation for high density lipoproteins. This is the good part of the lipid study. The most effective way of raising your HDL is with vigorous aerobic exercise. With the use of electronic medical records, I can give my patients an exercise prescription every time I see them in the office. Some statins also raise the HDL which is highly desirable.

Most patients are treated with a statin medication alone. There are a few high risk patients I see are on 2 or 3 different lipid meds. These are usually women who already have a scar down the middle of their chest (bypass) or a stent in one of their coronary arteries due to narrowing caused by "endothelial dysfunction."

During the annual physical examination, I always make suggestions for improving fitness and nutrition. I seldom, if ever, mention the "w" word or the "d" word (my code for weight and diet). If looking at the scale and/or going on a diet worked, I would be the first to get in line. I've never seen a scale or any diet have any lasting impression on people's lives. I have seen good nutrition and daily exercise make a profound and lasting difference. These are lifestyle

changes to give us a better life now and as we age.

I walked around the block this past weekend with my Mom. Mom has had a stroke that affects her balance. We proceeded slowly and we rested often. This is a woman who grew up in the Depression, had a successful marriage for 60 years, and raised four pretty good kids. She could help with homework, cook supper and have a rosary going in her pocket all at the same time. Now I help her walk. I couldn't help thinking about what we could have done for her if we'd had the drugs and care we have today back when she was my age.

Our grandmothers, mothers, daughters, and girlfriends are more at risk for vascular disease than breast cancer. Exercise, good nutrition, stopping smoking, controlling blood pressure and lipid levels have all been shown to reduce death and disability from vascular disease. It's time to take action. Remember, it is your life and it is your health.