

# ED... Marker For Vascular Aging

*"Erectile dysfunction really means you have endothelial dysfunction which can be a significant marker for vascular aging."*

Erectile dysfunction commonly referred to as ED is one of the hottest markets in the pharmaceutical arena. But did you know that if you have ED that really means you have "E.D." - endothelial dysfunction.

Endothelial dysfunction can be a significant marker for vascular aging. The endothelial layer of the blood vessels is where the action is. Back as far as the 1930's, Dr. William Osler said "You are only as old as your blood vessels." In an age of technology far beyond his imagination we are finding his words were prophetic. Healthy blood vessels mean healthy cells. But to have healthy blood vessels you must have a healthy endothelial lining. The endothelial lining is the determining agent for the health of the arterial blood vessel.

If we look at a cross section of the blood vessel, we see 3 distinct parts: the intima or



endothelium, which interacts with the blood; the media, which is smooth muscle and a protein matrix of elastin and collagen; and the adventitia, which contains strong fibrous tissue to maintain the shape of the blood vessel. But it is the endothelium, the membrane, that interacts with the blood we are focusing on here.

Think about it. If your blood vessels are sick, you will be sick. Oxygen, nutrients, cellular fuels all need to be transported by the blood and then absorbed via the endothelium.

The cells and even internal parts of the cells like the mitochondria are dependent on that very thin layer we call the endothelium.

The endothelium is responsible for modulating platelet function, coagulation, inflammation, permeability, contractile state, growth, migratory response and the redox state. If the endothelium is healthy, it affects the blood but it also affects the smooth muscle function of the arterial blood vessel.

“Joe, it seems like you're mostly talking about ED, endothelial dysfunction. Get back to the other ED, erectile dysfunction.” Here's the point. The endothelium can affect both the constriction of the blood vessel as well as the dilatation of blood vessels. That's how all the pharmaceutical agents work, by causing the dilatation effect. The end result of vascular aging is arterial stiffness, inflammation, oxidative stress, thrombosis, and hypertrophy of blood vessels, permeability, and a state of sympathetic dominance as well as vasoconstriction.

As you can see, this is a deep subject, one that I am barely scratching the surface. However, Dr. Mark Houston who is triple board certified in internal medicine, hypertension and anti-aging medicine does a great job in session 1 of his 4 CD series. I would be happy to send it to you; check below for information. He discusses vascular biology and the mechanism of how when you slow down vascular aging you will slow down aging as well. He states emphatically that the science to achieve these goals is here today.

One test that is easy to do and has profound implications is a spot urine test called microalbumin. Microalbumin is an excellent test to monitor diabetic renal disease. It determines the presence of albumin in urine. In a healthy body, albumin is normally not present in urine because it is retained in the bloodstream by the kidneys. So, if we see it in the urine, it is a problem. Although albumin is an important prognostic marker for kidney disease, it is an indicator of subclinical cardiovascular disease; and according to Dr. Houston, it is an inexpensive marker of vascular dysfunction.

Another marker for vascular dysfunction is systolic hypertension. This occurs when the systolic blood pressure is elevated but the di-

astolic is normal or reduced with an increase in pulse pressure.

How to treat ED, endothelial dysfunction that is? Dr. Houston developed a product called VasculoSirt. It is actually about 5 different products in one. You can click below for specifics, but VasculoSirt is a balanced multiple vitamin/mineral source with significant levels of CoQ10, vitamin K as menaquinone-7, Trans- Resveratrol, R-Lipoic Acid, Acetyl-L-Carnitine, green tea extract as well as specific phytonutrients supported by literature for their use in vascular health.

Dr. Houston recommends 5 capsules two times per day. He also uses a fish oil/GLA blend called EFA-Sirt Supreme at 6 capsules two times per day.

EFA-Sirt Supreme is a highly concentrated essential fatty acid blend, providing a specific combination of EPA, DHA and GLA with all natural mixed tocopherols specifically formulated to be high in (gamma)-tocopherol. These two products are the foundation for all his hypertensive and vascular patients. He will add other nutrients based on testing but these are his foundation.

I know I started today with an entertaining opening, ED really means ED. But endothelial dysfunction is very serious and many of your patients have it. In fact many of you watching this video have it. Why not learn to open these kinds of dialogue with your patients and begin testing and treating vascular health in a life enhancing way. Below, there's a Tuesday Minute on inflammation that discusses a few other tests that can be helpful as you measure and monitor your patients' blood vessel health.

Thanks for reading this week's edition. I'll see you next Tuesday.