



New Hypertension Treatment Strategy

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I thought I knew a lot about hypertension until I spent 8 hours with Dr. Mark Houston and heard his multiple strategies to address this pervasive problem. Clearly an expert, Dr. Houston has three fellowships beyond his medical degree in hypertension, internal medicine and anti-aging. Here's how he describes the progression of hypertension.

The body is insulted with an infinite amount of stresses and responds in an appropriate manner. However, as time goes on the appropriate response can become dysregulated. Even though there are infinite possibilities of insults or stimulatory forces, the responses by the body fall into three categories: inflammation, oxidative stress and immune dysfunction. These three categories of response cause blood vessels to suffer and endothelial dysfunction is the result.

So, the key idea is: an elevated blood pressure is the result of inflammation, oxidative stress and/or immune dysfunc-



tion. One of his main points was "Endothelial dysfunction and microvascular smooth muscle dysfunction precede the development of hypertension by decades." Hypertension is a perfect example of applying the wellness model effectively. If hypertension is detectable, endothelial damage is occurring on the inside.

In light of Dr. Houston's comments we can have endothelial damage without hypertension but once we have hypertension, damage to blood vessels is occurring. Once patients understand the process we can join forces

with them and find the cause. Dr. Houston went on to explain that hypertension is not just a disease of blood pressure, it is a disease that is concomitant of several diseases: obesity, abnormal insulin metabolism, accelerated atherogenesis, abnormal lipid metabolism, endothelial dysfunction, abnormal glucose metabolism, renal function changes, neurohormonal changes, blood clotting mechanisms changes, and decreased arterial compliance.

Dr. Houston says 70% of people with hypertension have one or more of these factors. And of course, heavy metal

toxicity, food allergies and chronic underlying infections will even add to the brew of possibilities. Can you see how a series of heart to heart conversations with a pain patient that has hypertension can convert them to a wellness patient for life?

So the new way to treat blood pressure is to find and treat the sources of:

- 1. Inflammation
- 2. Oxidative stress
- 3. Autoimmune dysfunction
- 4. Abnormal vascular changes
- 5. Genetic and epigenetic weakness

Obviously it takes time to evaluate and treat all these conditions. And during the process, patients need someone to coach and guide them, you. Let's briefly cover some of the factors that will reduce blood pressure.

Exercise will reduce blood pressure 11.3/7.5. That's the equivalent of one drug. In doses of 4.7 grams per day, potassium lowers blood pressure 8/4.1. Potassium also counteracts the effects of sodium and independently reduces the risk for stroke. Dr. Houston recommends 5 grams of potassium to 1500 mg of sodium preferably from fruits and vegetables. One of his quotes is "Every 1,000 mg increase of sodium increases all-cause mortality by 20%. Every increase of 1,000 mg of potassium per day reduces all-cause mortality by 20%."

Potassium-HP (with Magnesium) by Biotics Research Corporation contains 1200 mg of elemental potassium and 120 mg of magnesium per scoop. Potassium-HP (with Magnesium) also contains about 3.5 grams of citrate which has an independent alkalizing effect.

Alkalization, by the way, enhances nitric oxide production which is the major player to relax blood vessels and reduce hypertension. Dr. Abbas Qutab developed a product with Biotics Research to increase nitric oxide called Nitro-

Greens. NitroGreens should be considered on days when patients don't eat or won't eat greens, a starting source of nitric oxide. Nitric oxide is stored in vesicles called caveolae. When caveolae are disrupted so is nitric oxide, the result is hypertension.

What stabilizes caveolae? Omega-3 fatty acids and curcumin. Dr. Houston spent a lot of time discussing how to stabilize and heal endothelial tissue and one of his favorite nutrients is omega-3 fatty acids in the correct ratio. He explained that omega-3 oils should be in an ideal ratio of 3 parts EPA to 2 parts DHA and then 50% of the total of the EPA and DHA should be in the form of GLA. He also suggested that gamma tocopherol should be present to reduce oxidation. So, Dr. Houston formulated this exact ratio in EFA-Sirt Supreme by Biotics Research Corporation.

Also, after years of testing various combinations of nutraceuticals, Dr. Houston discovered a combination of nutrients specifically designed to raise endothelial nitric oxide synthase or eNOS. Bio-CardioSirt BP, a combination of vitamins C, D, B6 and Biotin, as well as magnesium in a proprietary blend of taurine and grape seed extract reduced blood pressure 16/11 in 4 weeks.

Obviously we are not going to solve all the blood pressure cases in the time we have here. But, I put together a check list that will help you identify and measure the process. Also, in case you are not doing it, take patient's blood pressure, the correct way, every visit. Once again, I want to encourage you to have those heart to heart talks with your patients. Not to scare them but to educate them about the damage that is occurring if they leave signs like hypertension unchecked.

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