Are Heart Attacks & Strokes Predictable? Part 4 of 4 Transcript

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Why Heart Attacks Can Seem Sudden

So now we're really cutting to the chase about can we really predict a heart attack or a stroke. And I was on a radio show last week and the co-host was a woman who was about 50 who exercised and took good care of herself, it ate pretty well, and she had a massive heart attack last May.

Like half of her heart. It was really serious. And she said, you know, this is what we often hear, like it just came from nowhere. I said well Vicki, usually there are some underlying causes, she was like, oh yes, they did finally diagnose what it was, I'll tell you about it in just a minute.

Something that should have been predicted ahead of time. So, like I said, this is a silent disease. So 90% of people with heart disease don't have any symptoms at all.

You dont know it's happening. Half of men and more than half of women have death from a heart attack as the very first symptom that anything was wrong.

They have a heart attack and they die. That could have happened to Vicki. She got some really excellent care really quickly. So here you go from not knowing anything's wrong to you're dead with nothing in between.

And there should be things in-between. Oop, I'm advancing my thing without… And the other thing, it's estimated anywhere from 50% to 77% of people who get hospitalized for heart disease have a normal cholesterol.

So you can see the disconnect between cholesterol and heart diseases and why chasing cholesterol isn't going to tell you whether you're going have heart attack or a stroke.

So I'm getting back to the picture that we had before. So how are you going to tell if you're at risk of a heart attack or a stroke? The first thing is to study what your arteries look like.

And your most accessible artery is your carotid artery, which is right in your neck.

Why Cholesterol Alone Misses Risk

The way it works for medical imaging is the closer the organ is, to probe that's doing the imaging, the clearer a picture you get. So here's your carotid artery just, you know, millimeters away from your skin surface, so you'll get a nice picture of what's going on in the carotted artery.

Before I go on to showing you what the Carotide Artery scan looks like, the easiest test of endothelial dysfunction, and it can only be done by, I would say, three people out of everybody, four people including Rob in this room, doesn't cost any money.

It won't get paid for by your insurance. It has no risk and it doesn't require a procedure to be done. The easiest test of endothelial dysfunction is what are your erections like?

Because if your endosthelium's not functioning well, your erections won't be as strong as they once were. And so that's a home test, of the endoethelio dysfunction.

It's significant one, and I don't think doctors pay enough attention to it. They'll give you Viagra instead of saying, wow, you might have some cardiovascular disease.

I mean, yeah, get a nice erection, but in the meantime, go look and see what your arteries look like. And this says, can we role play a couple who are too tired to have sex?

She's saying to him. So this is what the carotid intima media thickness looks like when we scan people. And this what an ultrasound looks, like it's in black and white.

This is a longitudinal section through the vessel. It doesn't look round because it is not that kind of cross-section. If you're cutting it this way. And this is the intima.

And you measure the thickness, that's your endothelium, and you can measure it. If there's plaque, you'll see a lump. and if it's soft plaque that is vulnerable, likely to rupture, You'll a bigger, softer plaque.

Carotid Scans and Endothelial Dysfunction

And if you see a bright spot that's calcium deposits, you'll know that that is a plaque that calcified. And what did I say about calciified plaque? You don't really have to worry about the calceified plaques.

So we have a direct measurement. We don´t have guess around based on family history, cholesterol, whether you have high blood pressure, although that´s an important factor.

We can look directly at your blood vessel and know if you have a problem. So that's the first step, is looking at you blood vessels. The next thing is starting to look at things in more detail.

Say that you do have plaque, say that do you a thickened endothelium, which is the 1st step. Then comes the plaque. You know, then comes vulnerable plaque Advanced lipid profile, something we call a lipoprotein particle profile is not just looking at your total cholesterol number, that's meaningless.

It's looking your particles. And remember I said you want to have beach ball particles, you don't want a little tennis ball particle. So this shows you some of the different Particles and this is your LDL cholesterol, your low-density cholesterol which is the one that doctors are always worried about on you.

And you can either have nice big particles or you could have little tiny ones and you want to have the big ones. You can predict whether your increased likelihood with that plaque and of rupturing if you have tiny particles.

So you wanna know your particle size and number. Excuse me, but does that come with your regular test? You have to ask for a special test, and it's called a particle profile.

It's not your regularly cholesterol. You know, the regular cholesterol, they give you your total, your HDL, you LDL and your triglycerides. And I think all of that, frankly, is useless except for the trigliserides Why are the triglyserides valuable?

They tell you about your carbohydrate intake, your predisposition to diabetes. That is what is going to cause you to lay down plaque. Blood sugar problems is one of the really big reasons.

So your triglycerides, if they're high, I'm concerned. Not your total cholesterol, that's not so meaningful. And if you go on a low carb diet, you will see your triglycyrides come down more than likely, unless you're one of the people with a genetic predisposition.

Then you've got another set of problems, but that is not most of us. Yes?

Advanced Lipid and Inflammation Testing

What you want to get is a particle profile, or it's also called advanced lipid panel. It's called a VAP, V-A-P. So there are different names for it. I don't know if your doctor is going to know about it or not.

Some of the doctors in the community are starting to order it for their patients. Not that many of them, but a few. But you can ask. And then the other thing that we look at is a comprehensive inflammatory markers.

And there are inflammatory that will actually give us an idea if you've got vulnerable plaque. The white blood cells, like I explained, that plaque is made up of white cells.

You can measure some of the components of those inflamed white cell in your blood stream on a blood test. So we do a lot of inflammatory marker testing.

And this is a slide made by Cleveland Heart Lab, which is the lab where we send our inflammatory blood tests and where send are advanced lipid profile testing.

And what they've done is give you a diagrammatic idea of what happens, right? So here's a nice, normal, healthy lining. The endothelium's nice and thin.

Here it's gotten a little inflamed and a litle thickened and it says down here myeloperoxidase and that is a chemical that you can measure that's made by these inflames white blood cells.

So we can measures your myelo peroxides and say, oh you've got some inflammation going on there even if you don't have significant plaque yet. And then at each of these stages, there are inflammatory chemicals that can be measured.

So we get a good idea of, you know, do you have plaque that's really about to blow? Do you a plaque there that needs something done about it, or are you okay?

And finally over here, it shows you acute coronary syndrome. That's when somebody's gotten a clot. It's ruptured, they've got a clot, and they're blocked off.

So when we look at the real causes of cardiovascular disease, it's not lack of statin medication. That's NOT what's giving you heart attacks and strokes.

It's inflammation going on, blood sugar problems, and it low hormones. These are the REAL causes. And so when, we see somebody who has vulnerable plaque in their artery, in the carotid artery we need to really look at blood sugars and Vicki who I mentioned who at 50 had a massive heart attack was an undiagnosed type 2 diabetic.

So if somebody had done her carotic scan they would have seen plaque and they have gone ahead and gotten her fasting blood sugar and if that didn't show anything then you need a two hour glucose tolerance test because it doesn't always show on the fasting one and she would've been diagnosed as diabetic and her heart would be avoided.

The other issue, inflammation. Where do we get inflammation from? Yes, we from inflammatory disorders, like I said, rheumatoid arthritis. We get it from periodontal disease.

Undiagnosed periodontal disease. And the scariest thing, which I learned when I took, I went to the very prestigious Bale and Donin preceptorship, Which is mentioned in my bio in here, with the cardiovascular preseptorship.

Learned that people whose carotid arteries, remember I told you it gets 70% narrowed down, they'll rhodorotor it? Well they looked at the particles that came off with a rodorotoring, It had bacteria in it, the same bacteria that was in their gums.

So this bacteria goes from your gungs to your carotid artery to cause inflammation.

Root Causes: Blood Sugar, Inflammation, and Hormones

and blood sugar problems are the cause of the vast majority of cardiovascular disease. And the big push in the last 50 years, and it's gotten us somewhere, is lowering blood pressure to reduce cardiovascular diseases, exercise, treating diabetes, But we've probably reached our limit in those things and these other approaches are what need to be taken in order to start looking at helping everybody else who hasn't been helped with blood pressure lowering

and treating their diabetes, the rest of us.

So the real solution is in doing the right testing. Like I mentioned, the carotid scan has a 97% correlation with plaque. We do the inflammatory test to look for, we look at eight different inflammatory markers.

Blood sugar test. The advanced lipid profile or particle profile. And hormone testing, this is what will give you a plan for avoiding a heart attack and stroke.

And then some of the solutions are things a lot lifestyle. If you find that you have a blood sugar problem, you need to just about eliminate carbohydrates from your diet.

Is it easy? No. As a species, we're hardwired to like carbs. They give us energy. Our bodies know that and our brains know, but it's not the best thing for your cardiovascular system if you've got a problem.

There are a number of supplements and I'll tell you about some of the supplements that we have. Hormones, like I said, are, in spite of what you've read, they're protective.

Flossing is really important. You want to avoid periodontal disease. So I want talk to you a couple of things and they are inside your folders underneath the slideshow.

I want to tell you a little bit about our heart health program because it really addresses all of the things that I just talked about. And then after I go through this, I'll be happy to answer questions.

So we want identify, treat, and monitor actual disease. We don't want a dance in a circle around your cardiovascular disease by treating your cholesterol.

The first thing we do is our carotid intima media thickness, and it's done with an ultrasound, a portable ultrasound. We do it here. You can either be sitting up or lying down.

It takes about five to seven minutes to do.

Heart Health Program and Treatment Options

Um, we have a really great tech named Linda Carrera, does the scanning and then it gets sent electronically to a lab that has a huge database so they compare you to people your age because in this situation in measuring the thickness you do want an age relative to your same age comparison and they issue a report card and you either get an A, B, C, D or E based on the sickness of the intima the amount of plaque and whether there's any narrowing.

And then we decide what to do based on what your inflammation tests show and what you're blood sugar tests shows. In my experience, it narrows down to either you may not be diabetic but you've got enough of a blood-sugar problem that's laying down plaque or you have periodontal disease that has not been detected and it's festering and causing inflammation in your blood vessel.

and people who have problems like rheumatoid arthritis really need to work aggressively on lowering inflammation. So, and the treatment and aggressiveness of treatment is based on how much plaque is there.

Is it soft plaque, which we worry about having a volcanic explosion. Some people, we use nutritional supplements to regulate things like blood sugar and lower inflammation.

Other people who have a lot of serious plaque. I do use pharmaceutical medications for blood-sugar lowering quickly. Nutritional deficiencies, low levels of vitamin D are definitely a risk factor for cardiovascular disease, heart attacks and strokes.

And the advanced cholesterol testing I mentioned as well, where we measure the type of particles and the

likelihood of getting deposited. And then we set goals, so it really depends on everything has to be individualized.

If you find out you have plaque, and we find the underlying cause, You have options for what you want to do. Do you wanna take the natural approach? Do want medications?

Huge amount of it is lifestyle, so we do a lot of lifestyle guidance here. What are alternatives to eating carbohydrates? What does eating paleo mean?

How do you adjust what your done your whole life to change on behalf of your own health? how much exercise is good? what kind of exercise? All of those things are addressed.

And we have a program called the Heart Health Quick Start Program that's an evaluation program where you get your carotid scan, you've got your inflammatory blood markers, your blood sugar markers and your lipoprotein particle profile.

and we go over the results and, you know, and then make recommendations. Some people continue care here, especially if they have bad plaque. They want to stay working with me and doing testing every three months to monitor the progress of their inflammation and blood sugar.

Other people are, they're doing pretty good and they are just going to continue on their own exercise and dietary program because it's working well.