



Dr. Steve Sinatra: Hi folks, Dr. Sinatra here. In today's episode of **Wellness Wisdom**, it's actually going to be a day in the office. You know, some of the things that I see, or which I saw years ago, on a day-to-day basis — and I mean, day-to-day — were atherosclerosis, a really hardening of the arteries, or leakage of the valves. And the most common leakage of the valve is really the mitral valve. But let's start with atherosclerosis.

First of all, what is it? Well, basically, in simple terms, it's just hardening of the arteries. Basically it's calcification deposits, it's cholesterol deposits, and basically, they can harden, they can form a plaque. You can have a plaque rupture that can set the stage for a heart attack. Or you can have angina, or a heart cramp, basically, you know, bringing someone into the doctor's office with symptoms.

So what I like to do is basically, a typical patient comes into the office, right? And they say, "Doc, for some reason, I'm getting some chest pressure, I never had it before." And right away, I would key in on it. Others would say, like a woman would say, "Geez, Dr. Sinatra, I brought the laundry up from the stairs. And all of the sudden I couldn't move. I was profoundly short of breath, and I was so weak, and I broke out into a sweat." To me that tells me it's the heart. So in other words, these patients would come in with all sorts of symptoms, but let's look at some classic ones.

When a male comes in with atherosclerosis and has symptoms of angina, or let's say a heart cramp, a typical male symptom is crushing pressure in the chest. Sometimes the pressure goes all the way out through both sides of the chest, and frequently it'll go down the left arm. And basically, that's a classical symptom of a heart cramp or angina pectoris.

A woman could have the same symptoms, but she might have atypical symptoms, and more atypical symptoms. Such as this, she can say, "Dr. Sinatra, I got this strangle feeling in the throat, or it goes up into my jaw. I have a feeling of a toothache and I can't explain it, my teeth are fine." Or a woman would say, "I got this profound shortness of breath, or this dreadful fatigue like I had when carrying the laundry up from the basement." In other words, any of these symptoms could specify hardening of the arteries, or atherosclerosis.

All right, so what do I do next? Well, basically I'll key in on the symptoms and if I think it's chest pain, and if I think it's not esophageal spasm, or it's not a dissection of the aorta, or a pulmonary embolism, or any of those really profound pathological situations, I'll key in on making a diagnosis of coronary insufficiency. In other words, the heart is not getting enough blood flow,



something's wrong with the vessels. They're either constricted, or they're full of plaque, or they're narrowed — but something is wrong.

So how do I make the diagnosis? Well, we've gone over some symptoms and basically, I'll get a couple of tests, a resting electrocardiogram. Frequently, a resting electrocardiogram, especially if I have an older one in the office to compare it to, I'll see new changes. And when I say new changes of what I call coronary insufficiency, some of them can be reflected on the electrocardiogram and, bam, I got my diagnosis. And now I take further steps to really confirm the diagnosis.

All right, suppose the EKG is normal. Well, what's next? I'll do an echocardiogram. I look at the echo, I'll look for wall motion abnormalities, or look for chamber size. I'll look for the possibility of pericardial inflammation, which can cause some of these symptoms. And if I strike out on the echo and if the echo looks normal, my next step is an exercise stress test, an exercise treadmill evaluation.

And what I do here is, we hook a patient up to an electrocardiogram. We get various ECGs on standing, sitting, and lying down. And then I'll ask a patient to walk on a treadmill. And at each stage, and a stage is usually three minutes, we call it stage one, two, three, four, sometimes five, I'll increase the incline and I'll also increase the speed. And frequently, on an exercise stress test — and I've done over 30,000 of them in my career — I'll see changes on the electrocardiogram. And frequently, the patient will say, "Doc, I got the symptom. I got the thing that I told you about last week, or yesterday, or whatever." And basically when I see the symptom, and I see positive EKG changes, it's a knockout punch. They have hardening of the vessels, they have atherosclerosis.

What's the next step? Okay, the electrocardiogram is negative. The stress test is positive. The echo is negative. But I have a strong suspicion that they have obstructive coronary artery disease. I'll do a coronary angiogram. I'll put a catheter in the groin, and I'll navigate it up to the heart. And then I inject dye, renography dye, into the heart — and as I'm injecting this renography dye, we're taking motion pictures. And we tilt the patient this way, and that way, and they're on a table, and I get oblique views, and lateral views, and frontal views, and side views. And now I can see the whole coronary circulation — it lights up like a Christmas tree, it's unbelievable. I see the vessels, I can see obstructions, I can see situations where now I know why the patient is symptomatic. At times, when even it happens, I'll see normal coronaries, as well. And basically what the patient was experiencing was coronary artery spasm, which is another



diagnosis, but it's not as virulent as diffuse, or what we call proximal atherosclerosis, or hardening of the arteries.

So, after the gold standard — and the angiogram is the gold standard — but it does have some risks. Now, some patients may say, “Well Dr. Sinatra, I don't want to take that little slight risk. Can I do something else?” And I thought, “Oh sure, you can do a CT angiogram, for example, or the EBCT.” And I had two EBCT scans myself. Look, you get a lot of radiation to the heart, but the EBCT scan, a non-invasive test, determines whether you have blockages or calcification of the coronaries. And the more calcium you have, the greater propensity you have for plaque rupture and a coronary vascular event.

So, we have coronary disease, we've diagnosed the patient. What's next? Well look, if the patient is symptomatic and they have obstructive coronary disease, and I don't think I can treat it very well medically, then I'll ask a surgeon to come to the table. There's no doubt about it, folks. Coronary artery bypass surgery works, it absolutely works. Some of my colleagues who said it doesn't, or this or that...believe me, they're not cardiologists, they don't know what they're talking about. Coronary artery bypass surgery saves lives, there's no doubt about it. The risk is minimal, and it's still done today, and it's a good procedure. They do so many different techniques! Sometimes they don't even have to open up the chest and give you a zipper! Sometimes it can go a little bit underneath the breastbone here, and through a rib. I mean, some of these centers really do some good work, so I'm pleased about the progress in cardiovascular surgery. I really am.

Now, there's angioplasty, there's stents, there's other things we can do. But generally, if there's multi-vessels, I like bypass over stent and angioplasty. If it's a single-vessel situation, I prefer a stent or angioplasty. If the patient's a diabetic with multiple-vessel disease, I may suggest only a stent or an angioplasty in one or two vessels. However, if the disease is really catastrophic, even in diabetics, I would recommend revascularization. And remember this, revascularization is all about symptoms. In other words, it's about quality of life. If I have patients who have coronary artery disease, but have an excellent quality of life, and if they can do a good job on a treadmill, I'll treat them medically. I'm not going to ask a surgeon to see these patients. Remember again, I'll harp on this over and over, surgery is about quality of life, that's what surgery is about. Will you live longer? Possibly, but it's about quality of life issues.

Now, suppose we don't do surgery, suppose we treat people medically. And you know, one of the Dr. Sinatra tips for the treatment of atherosclerosis, so hardening of the arteries. Well, it's simple. Basically, I recommend the Mediterranean diet. There's no doubt about it, I mean, the Mediterranean diet,



folks, is the diet of the 21st century. The PREDIMED study showed this, there's so much research on this. And look, folks, there are more 100-year people in the Mediterranean Basin than the entire world. In fact, Okinawa is being surpassed by Spain, Portugal, and Italy. You know, the average American lives to be 79.5. We've lost all of six months to a year because of COVID. But you know, the average Okinawan lives to about 86.7, in that area. The average Spaniard or person from Italy is even better than that. So, there's no doubt about it that there's something special about the Mediterranean Basin.

I personally think it's olive oil, I think olive oil is the "secret sauce" going forward. I've said it many times on our podcast. I mean, olive oil has this propensity of changing LDL to a more fluffy state. It changes small particle LDL to a fluffy, a non-invasive state. It changes to genomics. In other words, it takes pro-inflammatory genes and turns them back to a non-inflammatory state. I mean, there's so many good things that olive oil does. And to me, whether we live in Tunisia or Libya or Greece or Italy or Spain or Israel — it doesn't matter. I mean, these cultures use olive oil on a day-to-day basis. So, the Mediterranean diet with polyphenols, and carotenoids, and fresh fruits and vegetables, and a lot of Omega-3 essential fatty acids coming from the Mediterranean Sea, with all that olive oil sprinkled on top, and a lot of garlic and onions. I mean, garlic and onions are awesome! Not only do they improve what we call fibrinolysis, they can take sticky blood and make it like red wine, so to speak. What else do I like? I like Omega-3 essential fatty acids. I'm a big fan of calamarine oil. And I'll tell you why, because calamarine oil is weighted in DHA.

So, in the Mediterranean diet, we get fresh fish, there's no doubt about it. What else is in the Mediterranean diet? Well, the Mediterranean's eat lamb. Lamb is one of the food of the Bible, it's the food of antiquity. And why lamb? Well, lamb contains a lot of carnitine. Carnitine is really good for the heart, I love carnitine. Despite the fact that the research on TMAO may put a damper on carnitine. I don't really believe it, I just don't believe it because carnitine, I think, is phenomenal. And by the way, carnitine is found in flesh...certainly lamb is the greatest source of carnitine.

I really like the awesome foursome going forward. Any foods that contain CoQ10, certainly magnesium is found in fresh fruits and vegetables. Carnitine, I mentioned, is found in lamb. D-ribose, it needs to be purchased as a product. But you know, the awesome foursome with the Mediterranean diet is a great combination going forward.

Now, what else do people in the Mediterranean do, basically? Well, they drink a lot of coffee, and coffee acts as an antioxidant. But I was amazed, when I was overseas years ago, I was amazed that Mediterraneans, like the Japanese, drink



green tea...and that was a surprise to me, that really was. So, one of the things about green tea as a beverage is that I'll never forget a study I read, it was a coronary angiographic study. And being a catheterization cardiologist like myself, it really resonated with me. And what the study showed was that the Japanese looked at 500 patients with proven coronary artery disease by angiographic analysis. And what they showed was that if there was a reversal of basically atherosclerosis by drinking certain beverages. They looked at sake, and red wine, and white wine, and beer — and all these beverages, including black tea and green tea. And what they found, folks, was that if you drank three to five cups of green tea a day, you have reversal of atherosclerosis. That was big. I mean, that...I thought that one you could take to the bank. I mean, I really was impressed with that study.

But look, you know, there's a lot of MK-7 in the Mediterranean diet, as well. Now MK-7, I feel, is even better than green tea. Although I do drink green tea, I like green tea. But listen, MK-7 is found in hard cheeses, or you can also take it as a supplement. I think it's incredible. So to say it succinctly, what MK-7 does, or menaquinone-7 does, it takes calcium out of blood vessels where it doesn't belong and it puts it back in bones where it does belong. So, MK-7 is just an incredible nutrient to take. Again, it's found in a lot of hard cheeses, like a really hard, Dutch Gouda cheese, a really hard Parmesan cheese, things like that, where the harder the cheese, the more the menaquinone-7.

So to summarize, I talked about what brings people to the office, and angina pectoris, or atypical chest pain, is the number one symptom that I saw on a day-to-day basis. Folks, if I saw 40 to 50 people in the office, 10 to 20 of those people, or even more, would be there with that particular symptom. And look, it's the greatest cause of sudden death. I mean, one of the things that cardiologists like myself are privy to, we know that the first symptom of heart disease, the very first symptom, can be sudden cardiac death up to about 50% of the time. And that's a scary statistic to live by. And that's why when I saw people in the office and they told me about new onset symptoms, I would jump on it immediately, because sometimes you don't have the second chance.

So basically, I talked about what brings people to the office, I talked about how do we make a diagnosis, I talked about what do we do with the diagnosis, how do we determine surgical therapy versus medical therapy. You know, how do we bring supplements into the picture, how do we bring a diet, and basically lifestyle. And there's certainly exercise, and there's stress reduction, and there's also detoxification you can bring to the table. There's so many things you can do — even grounding.



And I think I'll land on grounding, folks, because I think the greatest research I ever made in 50 years of being a doctor is putting your bare feet on Mother Earth. It's free, it's easy to do. It's one of the reasons why I moved to the beach in Florida, so I can ground on the beach every day. I truly believe it with all my heart, and it's one of the things that I put in my treatment for atherosclerosis, a hardening of the arteries.

So, that's all I really have to say about that subject. I hope I've empowered you with some good information. Hopefully this conversation, if you're having any symptoms, will get you to a physician, get you diagnosed, and get you treated.

Dr. Steve Sinatra: From my heart to yours, I'm Dr. Steve Sinatra.