

## VIEWPOINT

# The Biggest Killer of Dentists

**S**teven Peters, DDS,\* was one of those health nuts—he ran, didn't eat much meat, and even practiced yoga. His cholesterol was good; his PSA was fine. His family and team at the office loved him. Then suddenly, one Friday afternoon, Dr. Steven Peters had a heart attack, and died on the way to the hospital at the age of 57.

You've probably heard that fitness guru Bob Harper of NBC's *The Biggest Loser* had a heart attack too. He was 51. If there hadn't been 2 physicians at the gym when it happened, he would have died. Bob Harper was in better shape than most everyone reading this article. Tim Russert of NBC's *Meet the Press* was on a statin drug. His cholesterol numbers were fine, and his blood pressure was under control. He had just passed a stress test and was under the care of some of the finest medical doctors available. And then, 8 weeks later at work, he died. He was 58.

### How Can This Happen?

As a dentist, your number one health threat is a heart attack or stroke. That's because you're an American, and as an American, "atherosclerosis" is more likely to be written on your death certificate than *any other cause of death*. It does not have to be that way! The No. 1 most common symptom that you have heart disease *is that you die. That's the most common first symptom!* You don't want to wait that long.

Franky, if you think you've got this cholesterol/heart attack issue all figured out, it's likely that you don't. If you think your physician and cardiologist are up to date, they probably aren't. They are assuredly good-intentioned and well-meaning

professionals, but most of them are practicing cardiovascular medicine that does *not* reflect what research has recently discovered about preventing the biggest threat to your life.

### So What's Going On?

The medical community is getting better all the time at keeping victims alive after they have had a heart attack or stroke. But where most physicians really fall short is in preventing a cardiovascular event from happening in the first place. Every 25 seconds, an American will have a heart attack. Every 40 seconds, someone in the United States has a stroke. The abundance and widespread use of cholesterol medications, and the plethora of advice about healthy eating and exercise are apparently not enough.

The current standard of care for predicting cardiovascular risk and the government's National Cholesterol Education program are based on a large, well-respected study involving a group of people from Framingham, Mass. Looking at the health habits and health outcomes of this group of people over several generations has allowed researchers to make associations and estimates of your future health risks. For example, let's say you are a 50-year-old male who doesn't smoke, has normal cholesterol levels, is not overweight, eats well, and exercises. Your statistical odds of having a heart attack over the next 10 years is about 4%. This is a minimal risk level, and it's probably not going to happen. Nothing to worry about. However, the problem is that prediction is based on a population experience. In other words, if you followed a group of



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100 people just like you, only 4 of the 100 would be expected to have a heart attack in the next decade. But *you* are not a population. You are an individual. The current standard that most physicians use to determine your statistical risk is *not* very predictive of you *as an individual*. If you have a 4% risk, your physician is just going to congratulate you and tell you to keep up the good work. Yet everyone knows stories of people who did everything right, followed the rules, were healthy, and still died from an unexpected heart attack. The normal response to a tragedy like that is “Well, you just never know; you never can tell.” *Wrong!* Now, we can absolutely know. A heart attack or stroke is not a surprise if you know what to look for. And if you know what to look for, and can see it coming, you can *prevent it!* And *that* is the point!

Optimal treatment is based on individual risk, not statistical risk.

### A New Approach

Currently, most cardiologists look at whether there's a problem with the flow of blood in your arteries. They check to see if the lumen, the place where your blood flows inside the artery, is open by doing traditional tests like stress testing, angiography, and other measurements. They want to know if there's a blockage in your circulation. But we now understand that most heart attacks are caused by non-obstructing plaque; plaque that's in the artery wall itself. You can have a heart attack or stroke with basically clean arteries. *That* is a major paradigm shift in our understanding of the biggest health threat to Americans. The disease and plaque starts *first* in the artery wall, and it often does not interfere with blood flow until the disease is quite advanced. However, if that artery wall plaque happens to rupture for some reason, spilling its contents into the lumen, the body will try to fix that event with a blood clot. If the clot is too big, or dislodges and moves downstream, a heart attack or stroke can result. Your lumen can be completely open just before you have a heart attack!

*For your true, actual, personal risk assessment, the extent, location, and severity of the disease in the artery wall has to be determined.* Fortunately, with the help of new technology, we can see if you have

diseased arteries *long before* any problem shows up with traditional tests.

The ultrasound carotid intima-media thickness (CIMT) test is the easiest noninvasive screening tool we have to determine arterial health. It allows arterial plaque to be detected long before current traditional testing techniques would indicate the presence of disease. A word of clarification is in order here.

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There are 2 carotid tests: the CIMT test and the Duplex test. The Duplex test is also an ultrasound of the carotid arteries of the neck and has been available for many years. You may have had it done at a health fair or by one of those traveling scanning companies. But it is limited in its usefulness since it only looks at the lumen and blood flow, not for the presence of disease in the artery wall. The CIMT test tells you far more. There is a well-documented relationship between CIMT and coronary heart disease in large, epidemiological studies.<sup>1</sup> Critiques of the methodology have been successfully addressed.<sup>2,3</sup>

When I offered the CIMT test recently at the Thomas P. Hinman Dental Meeting in Atlanta, 161 dentists and staff were scanned. Forty-nine had arterial ages at least 10 years older than their chronological ages. (Arterial age is a function of the thickness of the artery wall and inflammation, both contributors to heart attack and stroke risk.) The person with the biggest difference was an individual with an arterial age 32 years older than his or her chronological age. In addition, the presence of plaque large enough to be considered clinically significant was found in 78 people. Most of them had no idea of the possible dangers that lie in wait for them.

If your results are positive, with new genetic testing, we now can also find out *why* you have the disease and determine specifically what *you* can do about it. For example, the Apo E test helps determine which diet works best for you based on your genetic makeup. We now understand that fat and alcohol intake, as well

as physical activity, all can have a different effect on cardiovascular risk based on your particular genetic profile. Depending on your KIF6 gene status, there's a 40% chance that taking the popular statin Lipitor will not lower your risk, even though it will lower your cholesterol numbers. And, if you happen to have the right type of the 9P21 gene, you more than double your risk of having a heart attack. About 25% of Caucasians and Asians have inherited that dangerous type. You need a lot more information than you probably have now. Odds are very good that your physician is not testing for any of these.

### CLOSING COMMENTS

I am both a proponent and personal patient of this new approach to preventing America's big killer. In my opinion, I think it has saved my life. Established by a group of leading doctors, this new method is not being practiced by today's mainstream physicians or even cardiologists. The fact of the matter is that it takes, on average, about 15 years for research discoveries to be put into practice in your doctor's office. A lot of us don't have 15 years to wait.

With new technology and access to advanced genetic testing, you don't ever have to have a heart attack or stroke. That's amazingly good news!

*\*Name changed.*

### References

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*Disclosure: Mr. Meinz is a professional speaker and director of The Healthy Dentist Summit. He receives honoraria for lecturing.*