

The Heart Report
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By Annie Stuart

Although still relatively young, Ken Rezak started thinking he might be a good candidate for a heart attack a few months before his forty-fifth birthday. He'd been gaining weight on a bad diet, feeling more tired and taking two-hour naps on the weekend, which didn't do much to rejuvenate him.

As a supermarket sales manager, he felt his job was like "climbing inside a pressure cooker and turning up the flames with the lid on." On the morning of the day he planned to have a talk with the company president, Rezak awoke at the usual insulting hour of 5:00 a.m. ("I was only working half-days—twelve hours: half-days.")

The Castro Valley resident shut off his alarm, then felt an alarming sensation: a sharp pain across his chest and into his jaw. With a numbness creeping into his left arm, he lay back down and called his wife from the bathroom. "Now don't get upset," he told her. "I think I'm having a heart attack." Since she'd lost her first husband at the age of thirty-four to a heart attack, her husband's announcement was nothing short of terrifying. Rezak tried to joke with her on the way to the hospital: "You really know how to pick 'em, honey," he said.

Rezak was lucky. He recognized the signs of heart attack—not early enough to prevent one, but quickly enough to get to the hospital for help. Unfortunately, 350,000 people a year die from heart attacks before they reach the hospital. Of those who are admitted, 80 percent survive and are discharged.

The big problem is that the average person waits three hours before getting help. The confusing signs and symptoms of heart attack—combined with fear and denial—are the major culprits. Not everyone experiences classic, readily identifiable symptoms as Rezak did.

Take Jack, for example. Every day, the twenty-nine-year-old real estate agent walked up a steep San Francisco hill to catch the J-Church streetcar to work. Near the end of his strenuous trek one day, he felt a sharp pain in his molars. "I'll have to make a dentist appointment," he thought, and then thought little more about it, until it happened again the next day, and the next, during the course of his walking commute. Jack was experiencing angina, a temporary inadequacy in the supply of blood to the heart that can be the precursor to heart attack. The fact that it happened only during physical exertion, and subsided with rest, was his tip-off that what he really needed was a cardiologist, not a dentist. But who would think a pain in the jaw or teeth was associated with the heart, especially when no other symptoms were present?

“It’s not always easy to tell that you’re having a heart attack,” says Keith Cohn, MD, coauthor of *Coming Back: A Guide to Recovering from Heart Attack* and Codirector of Cardiology at San Francisco’s Pacific Presbyterian Medical Center. “It’s not always a terrible, awful pain—sometimes it’s much more subtle.”

Heart attack, in fact, could be labeled the Great Impostor. An uncomfortable pain or pressure in the chest might be confused with heartburn, a burning sensation in the esophagus caused by acidity in the stomach. (“After all, I did have Mexican food for lunch, didn’t I?”) A pain in the shoulders, neck, jaw, arms or back could just be a muscle sprain, right? (“I guess I overdid it in that racquetball match.”) Dizziness, faintness, sweating and nausea mean a touch of the flu is coming on—what else? When faced with the prospect of a potentially lethal attack, who wouldn’t mentally trade it for one of these more benign conditions?

That may be what Terri Uchino, fifty-three, did last spring. In retrospect, she believes her body sent some very subtle signals before she ended up in the hospital for triple bypass surgery. Then facilities manager for ICOT Corporation in San Jose, she spent a good deal of time walking around and climbing stairs, which inevitably gave her shortness of breath.

Chalking it up to the additional few pounds she’d put on, Uchino ignored the problem until one night she went to bed and couldn’t catch her breath at all unless she sat upright. After the tenth or twelfth time of alternating supine and sitting positions, she called her doctor, who advised her to come in.

“He said it was a good thing I came right away,” says Uchino, “because fluid had collected in my lungs and I might have drowned.

She was suffering from congestive heart failure, a condition with a slightly misleading name since it implies the heart is in imminent danger of stopping. It may not stop, but damage to the heart muscle—caused by rheumatic fever, a congenital heart defect, heart attack, arteriosclerosis or high blood pressure—makes the heart work less efficiently. Blood backs up in the veins, causing congestion in the tissues, swelling in the ankles, legs and abdomen and, sometimes, collection of fluid in the lungs.

After sitting (and lying) through “every test in the book,” Uchino was surprised to learn she’d had a “silent heart attack” some time in the past, which had contributed to her current condition.

Uchino’s experience shows that it isn’t always possible to identify heart attack, but at least we should know what to do if we suspect heart attack and what we can do to minimize the risks.

Charles Witherell, coordinator of UC San Francisco’s outpatient cardiac rehabilitation program, gives a few guidelines. If you’re carrying groceries upstairs, for example, and experience one or all of the above heart attack symptoms, stop what you’re doing and

rest. “Lie down or sit down,” says Witherell, “and if you have to sit down on the floor and it looks silly, then look silly.”

If the signs last for more than a minute, dial 911 or ask someone to call for you. “Don’t wait for a cab or try to walk or drive yourself to the hospital,” he says. Cohn agrees that you should “err on the side of going in,” but if the symptoms are subtler, you might call your doctor first for an evaluation. Someone with severe pain and sweating, however, shouldn’t waste time trying to get his doctor on the line.

If you’re with someone who might be experiencing heart attack, expect denial from the person. They’re going to give you lots of excuses for not getting checked. Be firm. Without scaring them, do what you can to convince them of the need to take action. Offer to call emergency and to ride with them to the hospital. Don’t leave them alone; if the heart and breathing stop, you may need to perform CPR (cardiopulmonary resuscitation—mouth-to-mouth breathing and chest compression), which will buy valuable time. Statistics show that a cardiac-arrest victim’s survival odds roughly double if he gets CPR fast.

If you have read this far, given an obligatory nod of your head and decided that most of this has little to do with you, think again. One out of two Americans die of cardiovascular disease. You can improve those odds considerably if you listen more carefully to what your heart tells you—and not just in the romance department.

It’s true; there are a few risk factors we can do little about. For example, the hormone testosterone makes men more vulnerable, while estrogen appears to protect women until menopause. The cumulative effects of aging also are hard to counteract. And someone with a family history of cardiovascular disease—especially someone with a parent or sibling who had an early heart attack—is particularly susceptible.

But many factors are largely within our control. The “big three”—high blood pressure, smoking and high cholesterol—work synergistically to equal a five times greater risk of heart disease. And all three may contribute to arteriosclerosis (hardening of the arteries), a degenerative disease that narrows or blocks arteries in the heart, brain and other parts of the body. As early as childhood, a combination of fat, fibrin (a clotting material), cholesterol and other particles begins collecting on the smooth walls of the arteries.

Gradually blood flow is restricted, causing a plumbing problem much more serious than any experienced after dumping chicken fat down the kitchen sink. In severe cases, this blockage prevents oxygen and other nutrients from reaching vital organs. When the coronary arteries are blocked, two events may occur: angina and myocardial infarction (heart attack), causing death of part of the heart muscle.

High blood pressure, or hypertension, results when the heart has to pump harder to force the blood through the arteries and veins. You may not know you have this “silent disease” until you get checked. Defined as systolic pressure greater than or equal to 140 and/or a diastolic pressure greater than or equal to 90, high blood pressure may cause

arterial damage or a slightly enlarged heart. Although its cause is usually not known, hypertension can often be reduced with medication, weight loss and a restricted intake of table salt (salt makes the body retain fluids). Uchino reluctantly sacrificed her miso soup and salty soy sauce to lower her blood pressure and reduce fluid retention.

Cholesterol is a fatlike substance transported in the blood with low-density lipoproteins (LDL). To the layman these two combinations are “bad cholesterol” and “good cholesterol.” When carried by LDL, cholesterol is deposited more readily on the arterial walls, increasing risk of coronary disease. The other transporter, HDL, apparently removes cholesterol from artery walls. You can raise your HDL level by stopping smoking, losing weight, exercising and drinking moderate amounts of alcohol.

It’s important to note that the liver produces all the cholesterol we need, even on a strict vegetarian diet. Reduce LDL by avoiding those infamous foods high in cholesterol and foods high in saturated fats, which cause the body to manufacture cholesterol. Items at the top of the no-no list are egg yolks, organ meat, whole dairy products, saturated or hydrogenated fats and oils, duck, goose, shrimp and prawns.

Rezak has stopped eating greasy fast food and has limited his consumption of meat. He now opts for skinless chicken, goodies from his vegetable garden and fish, whose oil may lower blood fats and reduce clot formation. He says his wife helps keep him in line. “When you marry an ex-mud wrestler, you don’t mess around.”

There’s some evidence that changing your diet can not only prevent but also substantially reverse the effects of arteriosclerosis. A recent University of Southern California study looked at 162 people who had undergone bypass surgery. After two years, those on a daily regimen of medication and diet cut their cholesterol levels by 26 percent, with 16.2 percent developing clearer arteries than when the study began. Also, autopsy studies of Europeans who died during the “lean” years of both world wars showed less plaque formation than expected, suggesting regression of arteriosclerosis due to a less rich diet.

According to the American Heart Association, many investigators believe that adults should keep their total cholesterol level below 200 milligrams per deciliter of blood. But take note: Since the standard of determining normal values is by averaging the already inflated American levels, your doctor may even consider 240 “normal.”

“Average isn’t normal in this case,” says Keith Cohn, MD. “If your cholesterol is significantly higher than 200, it isn’t healthy,” and you should get tested every six months until it comes down. You can get a more accurate picture by getting a lipid panel test, which will tell you the ratio of HDL to LDL. Cohn also recommends cholesterol tests for young adults, especially those with a family history of heart disease.

Most people have a fairly clear understanding of how smoking contributes to cancer—but what about heart disease? Smoking may carry out its deleterious duties in one of many ways. It reduces the blood HDL level and may damage the artery walls, allowing more cholesterol to cling to them. It may cause coronary thrombosis (formation of a blood clot

in vessels or the heart). And, last but not least, it may cause disturbances in the heart rhythm, resulting in sudden death.

If you smoke more than a pack a day, your risk of heart attack is double that of a nonsmoker. Uchino quit smoking with the help of her acupuncturist two years before her heart attack and is convinced that stopping saved her life.

Other factors that may contribute to cardiovascular disease are diabetes, obesity, sedentary lifestyle and stress. Had Uchino known she had diabetes (the silent heart attack she experienced is often linked to diabetes) and that heart disease ran in her family, she might have done more to reduce other risks. In fact, Uchino's family history was like a cardiovascular powder keg: Her father had died of cerebral hemorrhage, three close family members had diabetes and her brother had undergone angioplasty, a technique for unblocking coronary obstructions.

As for the relationship of heart disease to exercise and stress, the jury is still out. Cohn believes some researchers have become a little overzealous in attributing a multitude of health problems to stress. And a lot of people have followed their lead. In fact, surveys show Americans think stress is the leading cause of coronary heart disease—more important than high blood pressure, smoking or diet. Cohn agrees wholeheartedly that stress should be controlled since it “impairs lifestyle, drains energy, promotes negativity and can precipitate angina for someone already diseased.” But whether it's an independent factor that directly causes arteriosclerosis is debatable, he says. Further clouding the issue is the fact that stress often goes hand-in-hand with other risk factors, such as smoking and high blood pressure.

Evidence regarding exercise is a little more conclusive, although some might not agree, as indicated by a comment from one cardiologist. You can only hope it was made with tongue placed firmly in cheek: “A person has only so many heartbeats in a lifetime and should avoid exercise so as not to waste them.”

Exercise does lower LDL, raise HDL, help clear fat more quickly from the bloodstream and decrease clot formation. It may also increase the size of coronary arteries. But, says Cohn, “exercise isn't a panacea or elixir of immortality. Lots of people exercise, then go eat bacon and eggs and think they're immune to heart disease. You've got to have a well-rounded approach to health.”

Apparently a lot of people have been moving in that direction. From 1959 to 1979, two-thirds of Americans surveyed by the US Department of Agriculture had changed their eating patterns for reasons of health; and millions have taken up leisure sports and quit smoking for the same reason. The corresponding reduction in death rates is remarkable. Although it's still the leading cause of death, cardiovascular disease killed 27 percent fewer people over the past decade (through 1985), and the trend is continuing.

Technological advances in cardiology have also contributed to the fall in mortality rates. A combination of new medications, sophisticated surgical procedures and cardiac

rehabilitation programs, which provide support, education and supervised conditioning, all have given the heart patient a tremendous hedge against untimely death.