

Caught in Time

Eisenhower's General Counsel Undergoes Open-Heart Surgery

By: Roxanne Jones



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It all started in 2012 when Eisenhower Medical Center's General Counsel Michael Appelhans, started feeling "off."

"I lift weights at the gym on a regular basis, and I started feeling less and less energy," the then-61-year-old recalls. He went to see his Eisenhower Primary Care 365 physician, Stephen Steele, DO, who ran some tests and discovered that Appelhans had a severe sinus infection. "I had sinus surgery to clean things out, but my energy level didn't come back. And more tests didn't find anything."

A few months later, Appelhans started experiencing shortness of breath when walking up stairs, along with episodes of a fast heart rate and rising blood pressure. Dr. Steele referred him to Eisenhower Desert Cardiology Center Electrophysiologist Andrew Rubin, MD. "Mike had multiple risk factors for coronary artery disease (CAD)," Dr. Rubin says. "He had high blood pressure, high cholesterol, a long history of smoking, and he was overweight. Plus, he had a strong family history of premature CAD."

CAD is a disease in which a waxy substance called plaque builds up inside the coronary arteries, which supply oxygen-rich blood to the heart. Over time, plaque can harden or rupture. Hardened plaque narrows the coronary arteries, reducing blood flow to the heart, which can cause chest pain called angina. If the plaque ruptures, a blood clot can form, partially or completely blocking blood flow; this is the most common cause of a heart attack.

Dr. Rubin had Appelhans undergo a nuclear stress test, which is used to evaluate how well the heart works during physical activity. The results showed some mild blood flow abnormalities as well as some abnormal heartbeats, called ventricular tachycardia.

"An arrhythmia (an abnormal heart rhythm) can be a marker for higher-risk problems," Dr. Rubin explains. "Based on that, along with his symptoms and multiple risk factors, we sent him for a coronary angiogram." This is a procedure in which a catheter is threaded through the blood vessels to the heart, a contrast dye is injected, and X-ray imaging is used to see if any blockages are obstructing blood flow to the heart.

"We noted multiple blockages," Dr. Rubin says. "But none appeared definitively severe, so we didn't rush Mike to surgery. He was feeling better, so we decided to manage him medically for a while and monitor his progress."

Unfortunately, Appelhans' energy level continued to flag. Dr. Rubin ordered a coronary computed tomography (CT) angiogram. Instead of threading a catheter through the blood vessels to the heart, a CT angiogram uses a powerful X-ray machine to produce images of the heart and its blood vessels.

"The CT angiogram showed that his left main coronary artery was much worse than we originally thought," Dr. Rubin says. "CAD with a blockage in this artery is especially concerning because it's associated with the highest mortality of any coronary lesion. Appelhans' left main coronary artery was 90 percent blocked — too severe to consider balloon angioplasty to open the artery for stent placement, in which a tiny metal "scaffold" props the artery open."



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"It was time for surgery," Dr. Rubin says.

Appelhans was referred to Eisenhower Cardiothoracic Surgeon Joseph Wilson, MD, for an open-heart procedure called a coronary artery bypass graft (CABG) to improve blood flow to the heart. During this procedure, a healthy artery or vein is taken from the leg or chest wall and grafted onto the existing heart vessel before and after the blockage. The grafted blood vessel bypasses the blockage, creating a new route for oxygen-rich blood to flow to the heart.

Dr. Wilson performed a quadruple bypass on Appelhans. It was a two-and-a-half-hour operation during which four of Appelhans' coronary arteries were bypassed. It is referred to as open-heart surgery because the rib cage is spread open to access the coronary arteries.

"My surgery went incredibly well," Appelhans says. "I was in the intensive care unit (ICU) for two nights, on the cardiac unit for two nights and then home. I was up walking the second day after surgery."

He gives high marks to everyone involved in his care.

"I had researched Dr. Wilson before the surgery and his results are incredible," Appelhans says. "He's really on the cutting edge with the latest procedures like minimally invasive heart surgery. I wasn't a candidate for that, but it's good to know he knows how to do it. My anesthesiologist, Dr. Daniel Nelson, was phenomenal. And Dr. Shahriyar Tavakoli and the ICU staff were marvelous."

He also admits that he wasn't surprised to learn that he had coronary artery disease, even though he never had any chest pain.

"My dad died at 46 of a heart attack," Appelhans says. "My brother, who's four years older, had bypass surgery a year before I did."

"If you have risk factors for coronary artery disease, you have to be very attentive to symptoms," Dr. Rubin stresses. "Don't push things aside because they could mean something serious. Get evaluated."

"If you have a family history of coronary artery disease, recognize that even though you've been dealt this hand, you shouldn't do things that worsen your predisposition by smoking, being overweight or not exercising," he continues. "Control the things you can control — and you might not need surgery."

Appelhans has taken these lessons to heart, reinforced by his postoperative participation in Eisenhower's Cardiac Rehabilitation Program (see related story on page 46). He quit smoking before his surgery, he's exercising regularly and he's losing weight.

"Being a patient [where I work] was a very interesting experience," he adds. "I think everyone who works here should be a patient at some time. There are a lot of very professional people at Eisenhower who truly care about what they do. And they do a really good job."