

Choosing the **best stent** for heart patients

New tool helps cardiologists determine treatment

As an avid bike rider and seven-time RAGBRAI participant, John Stumpf, 37, wasn't a likely heart attack victim. In fact, the Monticello man works out almost every day, but it was during one of those workouts when he first started noticing something wasn't quite right.

"I was doing my cardio workout when I felt this ache down my left arm," said Stumpf. "At first I didn't think much about it, but when I mentioned it to my parents they urged me to get it checked out."

Stumpf set up an appointment with his family doctor, who arranged a stress test. As soon as the results came back, Stumpf's doctor sent him to see Hisham Wagdy, MD, a cardiologist at Cardiologists, P.C.

"Dr. Wagdy sent me right to St. Luke's Catheterization Laboratory," said Stumpf. "I had a slight heart attack and one of my arteries was 100 percent blocked. Dr. Wagdy placed a drug-eluting stent in my blocked artery. He told me I was lucky to be alive."

The week before, Stumpf was riding along Iowa's roadways in RAGBRAI. He still looks back and marvels that just days later he was treated for a heart attack.

Fast-forward a little over two years to present day. Stumpf recently turned 40,

but last summer he suffered another slight heart attack.

"I was sitting at my desk at work and I started to get this burning in my chest and pain down my arms," said Stumpf. "I went right to St. Luke's ER and before I knew it I'm back in the Cath Lab getting another drug-eluting stent."

This time it was a different artery that was 100 percent blocked. The original artery that was opened two years earlier remained open – thanks to the stent and medication he now takes.

What is a stent?

Over two million people receive stents each year, including about one million Americans. A stent is a small, lattice-shaped, metal tube that is inserted permanently into an artery. They are used to hold open arteries that have narrowed due to plaque build-up.

There are two kinds of stents; drug-eluting stents, the kind Stumpf received, and bare metal stents. Drug-eluting stents are coated with small amounts of medication that are released over time to help keep the arteries open.

Since the arrival of drug-eluting stents in 2003, recent medical studies have come out suggesting they may be causing blood clots that may lead to heart attacks or death long after implantation.

"It doesn't happen very often," said Dr. Wagdy. "We prescribe the medication Plavix, which is a blood thinner, to reduce the risk of blood clots."

To get the benefit, the patient has to continue taking the medication as prescribed, which can be an obstacle for some patients.

"The number one cause for problems with drug-eluting stents is patients who stop taking Plavix early," said Dr. Wagdy. "The recommendation is patients who get

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a drug-eluting stent need to take Plavix for at least a year. Those who get a bare metal stent should take it for a month."

In 2006, the U.S. Food and Drug Administration (FDA), American College of Cardiology and the American Heart Association recommended that every patient getting a stent have a discussion with their doctor about the risks of drug-eluting versus bare metal stents.

Last fall, a group of local cardiologists took this advisory one step further by creating a questionnaire that helps determine the best stent for each patient. The questionnaire appears to have decreased the use of

drug-eluting stents in Cedar Rapids. At one time most of the stents used were drug-eluting and now the numbers stand at around 50 percent.

“The questionnaire was designed to consider two factors,” said Dr. Wagdy. “What is a patient’s risk for reclosure of the artery? And if a patient were to get a drug-eluting stent, is it likely they will take Plavix for one year as prescribed?”

Stent pros and cons

According to Dr. Wagdy, there are several issues to consider when it comes to using stents. About one in five patients who get a bare metal stent will have a re-narrowing of the artery again in about six months. The drug-coated stents prevent re-narrowing from occurring. Another issue is that most surgeons will not operate on patients who are taking Plavix because it causes bleeding complications. As a result, patients should not have elective surgery for one year after getting a drug-eluting stent.

“We have to do what is best for each patient,” said Dr. Wagdy. This questionnaire is just one more tool to help me decide what stent is best for each person. You have to discuss all of these risks with the patients and let them know if a drug-eluting stent is used that they have to be diligent about taking the medication for one year.”

“I just take the medication,” said Stumpf. “I don’t think it’s a burden, other than buying it. It does cost about \$25-30 a month, but if it is going to keep me alive it’s a very small price to pay.”

And spending time with his wife Toni, and sons John and Troy make it all worth it to Stumpf. Plus, he’s looking forward to participating in his eighth RAGBRAI this summer.

John has practiced martial arts for the last eight years as a way to stay fit. He enjoys a work-out with Minseok Kang.

St. Luke’s offers HEARTaware, a free seven-minute online heart health assessment, which helps determine risk factors for heart disease. Log on to www.stlukesheartaware.com to take the assessment.