

May 24, 2001

New Coronary Stent Trials Underway at Carolinas Heart Institute

The Carolinas Heart Institute is one of only 55 centers nationwide involved in a study of a new kind of coronary artery stent, a small scaffold-like device designed to keep open vessels supplying blood to the heart after a balloon angioplasty.

“What’s different about this stent is that it’s covered with a polymer coating that contains medication to keep vascular tissue from growing into the stent, narrowing the vessel,” said Charles A. Simonton, M.D., the Sanger Clinic cardiologist running the study.

“Called ‘restenosis’, this reblockage has challenged physicians for years.”

In fact, restenosis is the most important challenge to the long-term success of angioplasty. Tissue ingrowth causes significant blockage in about 20% of patients and none of several drugs tested have been effective when given systemically. This has led researchers to investigate implanting medication on the surface of the stent that will act right at that site. Now a device has been developed allowing a medication called Sirolimus to be implanted within the polymer coating that is then time-released during the first several weeks after the stent is placed, deterring the tissue growth.

“It’s the biggest breakthrough in this field since physicians have understood that the site of a stent may re-narrow,” said Dr. Simonton. “Cardiologists began to suspect several years ago that if a drug could be delivered on the surface of the stent, it might be our best chance to prevent restenosis. It’s very exciting to be involved in this trial.”

This stent, like all such devices, is delivered by balloon catheter. When the cardiologist gets it into position, the balloon is inflated and the stent which had been placed around the balloon, expands to the proper diameter. The balloon is then deflated and the

catheter removed, leaving the stent behind where it will continue to keep the vessel open.

The trial now underway at Carolinas Medical Center and other centers in the U.S. will enroll a total of 1,100 patients, 20-40 of them in the Charlotte region.

Through compassionate patient care, innovative medical procedures and a strong sense of community, the Sanger Clinic has built a reputation of trust and stability in the Carolinas. Founded in 1946 by Paul W. Sanger MD, the Sanger Clinic has grown to include an impressive staff of adult and pediatric cardiologists, and cardiac, thoracic and vascular surgeons. With 11 locations in both North and South Carolina, the Sanger Clinic offers convenient access to heart care. For more information, visit our website at www.sangerclinic.com