

Device cleans up peripheral arteries

Q-C doctor shows off new catheter to national audience

Deirdre Cox Baker | Posted: Friday, March 5, 2010 8:57 am

Not unlike a plumber cleaning out the pipes in a house, Dr. Eric Dippel uses a nifty new tool to clear the arteries in a leg of built-up plaque.

The Spectranetics Turbo Tandem catheter combines a laser and shots of very localized energy to zap the plaque that builds up inside those blood vessels. The built-up mass makes it painful to walk and is also a symptom of peripheral arterial disease, or PAD.

It's a problem that especially bedevils elderly patients who tend to brush off the pain as a fact of getting old, Dippel said. "If Grandpa gets chest pain, he's taken to the emergency room. If his legs hurt after he walks out to the mailbox, he just thinks it's part of getting old," the Quad-City cardiologist added.

Successful removal of the plaque adds to a patient's quality of life, he said.

"All of a sudden, they'll say they don't feel old anymore and they go out to the mall, shopping and more. It's a very big impact on their quality of life and functional capacity," he added.

Dippel, who also has a degree in biomedical engineering, likes to come up with ways to improve such devices for general surgical use. He worked with the manufacturer, Spectranetics, to improve the style of the catheter. Then he demonstrated its use in mid-January on a live satellite telecast that originated from Trinity Bettendorf, formerly known as Trinity at Terrace Park.

The doctor operated on two patients as he explained the catheter's workings to the telecast audience. "Everything went very well," he said.

Dippel also conducted clinical trials on the device as Spectranetics sought official approval for its use from the U.S. Food and Drug Administration.

Plaque build-up occurs mainly in older patients, and it worsens if the patients have diabetes, are obese or are smokers. The blockages are about the diameter of a pencil, and they can vary in length from about half an inch to some that stretch all the way from the hips to the knees.

The blockages eventually cause issues with circulation and ulcers on the feet, and they can require amputation in some cases.

The Turbo Tandem catheter is an example of cutting-edge devices used by area practitioners to treat patients. "It's another tool in the tool bag to do my job," Dippel said.

Dippel is with Cardiovascular Medicine, PC, in Davenport, which is on the Genesis Medical Center-East Rusholme Street campus and has satellite offices throughout the Quad-Cities, eastern Iowa and western Illinois.