

ANOTHER FIRST

CRMC Celebrates First Chronic Total Occlusion Surgery

Minimally Invasive Procedure Ideal for Those with Secondary Blockages and Those for Whom Open Surgery Would Be Too Risky

hen Danny Gean came to Cookeville Regional for emergency surgery to clear a blockage in a major artery following a heart attack, his cardiae surgeon, Dr. Matthew Sample, discovered Gean also had an artery on the back of his heart that had been completely blocked for a long time.

Fortunately, Dr. Sample is trained to do a new type of minimally invasive surgery on this more difficult type of blockage, called a "chronic total occlusion." So, two months later, when Gean had healed from the first surgery, he returned to Dr. Sample and became the first Cookeville Regional patient to undergo this groundbreaking procedure, called "percutaneous intervention of chronic total occlusion" (PICTO).

"PICTO is just a collection of techniques and tricks to get through these permanently blocked-off arteries," said Dr. Sample, "In As more therapies become less invasive, we're able to give the patient all of the options and let them decide . . . what's best for them.

DR. MATTHEW SAMPLE

Danny's case, he had a very long segment of 100-percent blockage, so there was no path for the stent wire to take other than through the artery wall itself. If the blockage had only been there for a month or two, it would have gone through like butter, but it had clearly been there for much longer, making it a very challenging vessel to get through."

The standard of care for CTO has traditionally been bypass surgery. But because bypass is a very invasive surgery where the patient's chest cavity must be cut open, it is usually done only when several arteries — or a single, major artery — are blocked so that the condition is life-threatening.

For Gean, who only had one non-major artery blocked, bypass surgery seemed too risky and invasive.

"If our only option was open heart, I probably would not have chosen that, because it would have been like, I'm going to improve my quality of life this much, but I've got all of this to go through," said Gean. "The tradeoff just wouldn't be there, really."

But thanks to PICTO, Gean was able to have the blockage cleared in a minimally invasive procedure that involved only a catheter through his wrist while he was under conscious secution.

"I had it on Monday, we checked out Tuesday,

I was off work Wednesday and went back on Thursday," he said,

"The patients who are most appropriate for the PICTO procedure are ones who have these chronic blockages that are symptomatic," said Dr. Sample. "There are good reasons to do it even if a patient is asymptomatic; that could include reduced pump function of the heart or being a very young age. Danny's got a long time to live with this 100-percent blockage, so even if he had been asymptomatic, I might have still recommended it."

PICTO is also a great option for those who would normally receive bypass surgery but have health complications — such as advanced lung disease like COPD, advanced age or multiple organ dysfunction — that would make the risk of open surgery too great for them.

"A lot of medicine is coming down to patient preference," said Dr. Sample, "As more therapies become less invasive, we're able to give the patient all of the options and let them decide, with some guidance, what's best for them. I see it as a nice addition to what we already offer."

Best of all, patients now have these types of options available to them in a facility that's close to home.

"This chronic total occlusion that we're doing at Cookeville Regional is brand new." said Dr. Sample, who has performed several more of these procedures since the one he did for Gean last October. "There are major medical centers in Nashville that don't do CTO interventions, so this is something that is very unique for hospitals in towns the size of Cookeville to be doing."

And now, thanks to Dr. Sample and Cookeville Regional, Gean feels like a new man.

"The first night after he did that procedure, I could tell there was blood flow," said Gean. "I could take a deep breath. And just the quality of life I feel is going to be better than what I was experiencing before, that I was putting off as just getting older."



Danny Gean meets with Dr. Matthew Sample.