

New Heart Tech Sends Shockwaves

Randy Thomas, a 67-year-old truck driver, was riding through life without worry when an Illinois Department of Transportation physical stopped him on a dime.

“For the DOT physical to drive a semi they came up with this new policy, every two years you have to have a stress test. Well I failed it. I didn’t even know I had trouble,” recalled Thomas.

The Abingdon, Illinois native was surprised to learn he was suffering from coronary artery disease - the buildup of plaque in the heart’s arteries, which can lead to heart attack. This plaque causes the coronary arteries to become rigid, or calcified, making the stents Thomas needed difficult to deliver.

Dr. John Rashid, an OSF HealthCare Cardiovascular Institute cardiologist, had a high tech solution to Thomas’s coronary calcification: intravascular lithotripsy (IVL), an innovative technology from Shockwave Medical.

The Shockwave IVL helps to make treatment safer and more effective for people with coronary artery disease. It uses sonic pressure waves to break up calcium in arteries, including the coronary artery, making the artery less rigid. That makes it easier to safely insert a stent and restore blood flow without complications.

“So there are these emitters, and these emitters create energy. The energy is in the form of shockwaves, so it can shock the calcium not only inside the vessel, but also in the wall of the vessel,” explained Dr. Rashid.

OSF HealthCare Saint Francis Medical Center is the first hospital in central Illinois to use the Shockwave IVL, and on March 28, 2021, Thomas was the first patient to benefit.

The Shockwave IVL is delivered through an artery in the groin, and the patient remains awake throughout the procedure.

According to Thomas, it was a much easier process compared to the two stents he had placed in 2002, which required a six-week recovery period.

“I hope they use it a lot. Really. It’s not near as hard on you,” he said. “It was easy. I didn’t feel anything, when before I did.”

Prior to the Shockwave IVL, a case like Thomas’s would have required a technique called rotablation, where a tiny drill is used to chip away at the plaque, to gradually widen the narrowing. Dr. Rashid says technological advancements like the Shockwave IVL can bring peace of mind to both patients and providers.

“It gives more opportunities for people like me to treat their disease, versus going to a heart surgeon and having to go through open heart surgery,” said Dr. Rashid. “Technology brings us less invasive procedures and better results.”

And along with better results comes better quality of life. Dr. Rashid says leaning into new medical advancements allows care teams to get patients back to living their lives without chest pain or discomfort.

“You’re trying to prolong a good lifestyle and being able to do what you want to do, with kids or grandkids, golfing, what-have-you. So the technology allows us to treat legion subsets that typically we couldn’t treat easily before, and this technology makes it easier on us, which makes it easier on the patient,” said Dr. Rashid.

Thomas agreed. When asked if this experience changed his perspective on things, he gave seven reasons why it did.

“Yes. On life. Because this last time he said in three months I wouldn’t have been here. I have seven grandkids.”

For more information about the Shockwave IVL and other interventional treatments available through OSF HealthCare Cardiovascular Institute, click [here](#) or go to [OSF HealthCare.org/heart](https://www.osfhealthcare.org/heart).