Cardiologist uses new minimally-invasive device to quickly remove serious heart infection

Carolyn Scofield
scofield@tulane.edu
(504) 881-4542

Dr. Zach Rozenbaum is an assistant professor of medicine and director of the Structural Heart Disease Program at Tulane Medical Center. (Photo by Cheryl Gerber)

The patient arrived at Tulane Medical Center in serious condition. The 30-year-old woman had a severe infection caused by drug use on the tricuspid valve of her heart. She wasn't responding to antibiotics and her kidneys were shutting down. Zach Rozenbaum, MD, assistant professor of medicine at Tulane University School of Medicine and director of the Structural Heart Disease Program at Tulane Medical Center, knew there were few options left.

Rozenbaum used a device called an Alphavac, which removes masses on heart valves by going through the neck without the need for open heart surgery. Older

surgical devices were much more invasive and required artificial circulatory support, along with a team to operate it. The AlphaVac works mechanically with no external support needed – and the procedure is minimally invasive, requiring virtually no additional recovery once the patient clears the infection.

After Rozenbaum made a small incision in the patient's neck removed the entire mass of bacteria, his patient went from being near death to no longer needing dialysis within a couple of short weeks.

The AlphaVac is relatively new to the field of medicine, and Rozenbaum is the first cardiologist in the state to perform the procedure. Heart infections like his patient experienced are most likely to affect frequent drug users, and Rozenbaum has already used the AlphaVac successfully three times in three months.

"We have a true opportunity to treat and help these patients," said Rozenbaum. "And it's not just me. It's a whole team, the hospitalists and internal medicine physicians who treat the patients, the entire staff. I feel lucky to be in an environment that supports the advancement of medicine."