UAMS First in State to Use Advanced Liver Transplant Technology

LITTLE ROCK — A liver transplant recently performed at the University of Arkansas for Medical Sciences (UAMS) was the first in the state to use groundbreaking technology that preserves donor livers and keeps them viable for an extended period of time.

The new technology allowed a Cabot man to obtain a liver from a donor in Oklahoma only a week after being placed on the waiting list and then to return home a week following the surgery.

Patient Terry Fortner, 66, said he was told when he was placed on the transplant list Sept. 24 that it could take months, if not years, for a suitable donor liver to become available in close enough proximity to UAMS to remain viable during removal, transportation and re-implantation.

His UAMS transplant surgeon, Raj Patel, M.D., credited the OrganOx metra device, which uses normothermic perfusion to preserve the liver with oxygen and nutrients and then maintains the organ at body temperature for up to 12 hours, with ensuring the organ remained in prime condition for implantation.

Patel said organs begin deteriorating rapidly upon removal, and their condition upon arrival affects the difficulty of the surgery and the extent of post-operative measures such as transfusions. He said the donor liver that Fortner received though LifeShare of Oklahoma, a nonprofit organ procurement organization, was in good shape after being driven to UAMS from Tulsa, which helped prevent any major complications during the six-hour surgery that began Sept. 30 and ended early Oct. 1.

Without the technology, Patel said, Fortner may have received the same donor liver but faced a rougher recovery that required a longer stay in the hospital. He said the perfusion
technology not only keeps the donor liver oxygenated but also allows surgeons to test a liver before implanting it, reducing risk to the patient.

UAMS hopes to have its own OrganOx metra device in 2023, Patel said.

“Our main goal is to increase the number of livers available, so we can test livers and do more complicated liver transplants,” he said.

Fortner, senior pastor at Zion Hill Baptist Church in Cabot, said he was diagnosed five or six years ago with nonalcoholic fatty liver disease, an increasingly common condition worldwide that has been called an American epidemic and is linked to poor diet and obesity. He said he weighed 340 pounds before, in 2020, “my gastroenterologist convinced me to take this thing seriously.”

Dietary adjustments helped Fortner slowly lose weight while undergoing bloodwork every six months to monitor the disease’s progression. Then in July, the blood tests showed Fortner would soon need a liver transplant, and his doctor sent him to UAMS.

Fortner said the UAMS team “put me through every imaginable test” in preparation for being placed on the transplant list, which occurred while he was hospitalized for a fever and his situation suddenly worsened.

Patel said patients like Fortner who have lived with a liver disease diagnosis for several years often take a turn for the worse very quickly, and the situation is very precarious, with some patients eventually becoming too sick to receive a transplant.

Then on the night of Sept. 29, he heard the good news — “They said, ‘We’ve got a match.’”

Fortner and his family spent all day Sept. 30 waiting for the donor organ to arrive and be readied for transplant, and the surgery began late that night.

Five weeks later, and now down to 243 pounds, he said, “I feel amazingly well.”

Fortner said he and his wife, Robbie, have four grown children, five grandsons and one granddaughter, “and we’re all extremely happy that I’m still here.”

“I give God the credit for these answered prayers,” Fortner said. “He works miracles through these doctors. UAMS is full of absolutely wonderful, professional, caring people.”

“Even right down to the people that come in and clean the rooms,” added his wife, Robbie.

LifeShare is the first organ procurement organization in the United States to own and operate the OrganOx metra device, which was approved by the FDA in January for use in transplants and was first used in May in Oklahoma.
“LifeShare is proud of the work we have accomplished to advance liver perfusion in the donation and transplantation field to save more lives,” said Jeffrey Orlowski, president and chief executive officer of LifeShare. “It is partners like the University of Arkansas for Medical Sciences that make efforts possible.”

UAMS is the state's only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; a hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS' clinical enterprise. UAMS is the only adult Level 1 trauma center in the state. UAMS has 3,240 students, 913 medical residents and fellows, and five dental residents. It is the state's largest public employer with more than 11,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children's, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on Facebook, Twitter, YouTube or Instagram.