

UAMS News Bureau

Office of Communications & Marketing
4301 West Markham # 890
Little Rock, AR 72205-7199

uamshealth.com/news



**News Release
Aug. 22, 2019**

Media Contacts:

Leslie W. Taylor, 501-686-8998
Wireless phone: 501-951-7260
leslie@uams.edu

Liz Caldwell, 501-686-8995
Wireless phone: 501-350-4364
liz@uams.edu

Carotid Repair Technique Performed at UAMS is State's First

LITTLE ROCK — A vascular surgeon at the University of Arkansas for Medical Sciences (UAMS) has performed the state's first transcrotid artery stenting using flow reversal, a new technique that provides a less invasive and potentially safer option to treat plaque buildup in the carotid artery.

The carotid artery is the main vessel in the neck that supplies blood to the brain, neck and face. Plaque buildup in the carotid artery is a major cause of stroke, and often patients discover the blockage after experiencing stroke-like symptoms or a brief stroke-like episode known as a transient ischemic attack (TIA).

To perform the procedure, the surgeon makes a small incision just above the collar bone to reveal the carotid artery. A soft, flexible sheath is placed directly into the carotid artery and connected to a system that reverses blood flow away from the brain during the stenting that follows. This provides a barrier of protection from the fragments of plaque that may come loose during the procedure and could otherwise travel to the brain, creating a risk of stroke. The blood is filtered and returned through a second sheath placed in the femoral vein in the patient's thigh. After the stent is in place, the sheaths are removed and blood flow returns to normal.

[Kyla R. Shelton](#), M.D., performed the procedure. She is an assistant professor of surgery in the Division of Vascular and Endovascular Surgery in the UAMS College of Medicine.

Shelton said transcrotid artery stenting is preferable in certain patients to traditional methods for several reasons

One traditional approach is carotid stenting from the femoral artery in the thigh. The surgeon has to thread through a lengthy amount of blood vessels before ever reaching the carotid artery, and once there, has to cross through the area of plaque buildup before deploying a protective device that is shaped like an umbrella prior to stenting the carotid

--more--

artery. Traveling so far and crossing the plaque creates multiple opportunities for a piece of plaque to come loose and travel to the brain.

Another traditional approach includes open surgery at the carotid, which is an effective approach but is not right for all patients, Shelton said..

“I’m happy to have another option to offer patients who are older or are otherwise not suited for open surgery or transfemoral carotid stenting,” Shelton said. “I think this new technique has the potential to replace some of our older methods in a way that serves patients.”

UAMS is the state’s only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; 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. It is the only adult Level 1 trauma center in the state. *U.S. News & World Report* named UAMS Medical Center the state’s Best Hospital; ranked its ear, nose and throat program among the top 50 nationwide; and named six areas as high performing — cancer, colon cancer surgery, heart failure, hip replacement, knee replacement and lung cancer surgery. UAMS has 2,727 students, 870 medical residents and five dental residents. It is the state’s largest public employer with more than 10,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children’s Hospital, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on [Facebook](#), [Twitter](#), [YouTube](#) or [Instagram](#).

Like us, we’re social:    

###