

# Tulane Doctors Perform First “EVAR” Using CO<sub>2</sub> Angiography in Southeast United States

Tulane Medical Center September 15, 2016



*Dr. Jim Caridi*

Tulane Health System is breaking ground by using carbon dioxide (CO<sub>2</sub>) instead of conventional iodinated contrast during **endovascular abdominal aortic aneurysm repair**, also referred to as **EVAR**. Recently, physicians in the Tulane catheterization lab performed the first **EVAR** procedure in the southeast United States without the use of contrast dye in the non-surgical approach using stent graft.

Small injections of carbon dioxide were used to visualize the vessels under fluoroscopy. “Because CO<sub>2</sub> is a natural byproduct, it is a safer alternative for patients who have a history of diabetes or compromised kidney function,” said Dr. Owen Mogabgab, a cardiologist with the Tulane Heart and Vascular Institute. “Therefore, the gas is the preferred contrast agent for stent placement.”

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Tulane interventional radiologists partnered with cardiologists to perform the procedure. “We are very fortunate to have a team of cardiologists who work hand-in-hand with interventional radiologists to develop innovations like this,” said Dr. Mogabgab. “This is exactly the kind of innovation an academic medical center like Tulane can cultivate.”

This technology has been pioneered by Tulane Interventional Radiologist Dr. Jim Caridi. His ground-breaking work is being featured on an international stage later this month when he presents at the International Conference on CO<sub>2</sub> Angiography on Sept. 20 at the University of Bologna in Italy.

Frequent scans using contrast can cause contrast-induced nephropathy, or kidney damage. In the CO<sub>2</sub> procedure, a small amount of carbon dioxide is injected in the bloodstream instead of contrast to highlight the blood vessels and any blockages. The carbon dioxide is dissolved in the blood and then eliminated through the patient’s lungs.

With the largest group of CO<sub>2</sub>-trained physicians in the state, Tulane doctors are often successful in preventing amputations and other complications associated with chronic diabetes and kidney issues.

“CO<sub>2</sub> is helping prevent complications and allowing for angiograms and other procedures for patients who were previously unable to receive them,” said Dr. Brookes Ezell, a Tulane interventional radiologist. “In many cases, this technology is providing new opportunities for care to people who had frankly run out of options.”