

## HEALTHY LIVING

# Dramatic new world in brain, lung surgery

## Cutting-edge procedures in Southwest Florida

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Two to 2 ½ percent of the population is walking around with an aneurysm in the brain," says Dr. Eric Eskioğlu of HealthPark Medical Center. Most of these folks are blissfully unaware; a rupture of the balloon-like bulge in a brain's blood vessel is fatal as high as 50 percent of the time. But now, patients who learn of their situation in time have an amazing surgical option for eliminating the threat: one local doctor actually "caulks" aneurysms full of a putty-like substance called Onyx.

Delivered via a tiny catheter, and without opening the skull, the Onyx procedure is "like playing Star Wars in the brain, and we win; we beat the bad guys," says Dr. Eskioğlu, with a laugh. He is one of only about 10 doctors in the entire country who's adept in this method, and he and his neuroendovascular team are based right here in Fort Myers.

Most people know that chest pain plus left arm pain can signal a heart attack. The signs of an aneurysm in the brain are headaches and facial numbness. Some patients discover this scenario by having an MRI or CT scan of the head.

Others are not so lucky.

A ruptured aneurysm can give you "the worst headache of your life, nausea, vomiting, neck stiffness, and an aversion to light," explains the doctor. In this emergency situation, a patient can become comatose; "they're very sick and bleeding in the brain," says Dr. Eskioğlu. About half of the patients he sees are in that population, including those whom other doctors have diagnosed as without hope. The Onyx procedure has changed all that.

The procedure, which Dr. Eskioğlu teaches to colleagues around the country, is done through a catheter in the groin. The Onyx putty solidifies as it comes out the other end, filling the brain aneurysm and eliminating the threat. Access to the brain is much easier from an artery in the groin, according to the doctor. "You thread that tiny little incision in the groin," he says, "so you don't have to open up somebody's skull and put a clamp on." For most of the past 35 years, patients requiring brain surgery had their skulls opened. Dr. Eskioğlu and his team present a far less invasive alternative. There's only a 3 percent chance of rupture during the procedure, but the doctor can insert the putty quickly. HealthPark is only the second place in the entire country to offer this procedure.

The old style of brain surgery — cracking open the skull and using clamps — meant scars, 3-4 days of swelling and a six-week recovery period. With the Onyx procedure, patients normally go home the next day and are back at work in a week.

A good alternative to Onyx is Dr. Eskioğlu's use of "coils" to fill a dangerous arterial bubble. Not unlike the old sponge animals that would expand to fill a glass of water, coils come in hundreds of shapes and sizes, and expand to fill the bubble that is an aneurysm. The doctor has to first choose which coil will best fit and fill the misshapen blood vessel; his selection is then delivered to the troublesome blood vessel via a catheter no larger than



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Dr. Eric Eskioğlu of HealthPark Medical Center and his surgical team use a space-age operating room to perform cutting-edge brain surgery.

a hair, and begins to expand as soon as it is expelled. The components of this procedure are so minute, they can only be seen by microscope.

Dr. Eskioğlu is nothing if not cutting edge. He's currently involved in three clinical trials. "We're able to open the smallest arteries in the brain," he says, of using stents as small as two millimeters. "With carotid disease, you can have blockages in the arteries that are in your brain, as well as your neck. Until now, we couldn't fix the ones inside the brain. The arteries in the brain are smaller and more fragile." The doctor's brain stents are not 'drug-alluding,' meaning they have no drugs on them. "They just open up the artery and prevent you from having a stroke," he says, matter-of-factly. "The exciting thing is we're going to start treating strokes like heart attacks; they're going to be called brain attacks."

HealthPark is one of only 10 places in the whole country where clinical trials are happening for brain attacks. "We use this new device — a little anchor — that pulls out the clot," says Dr. Eskioğlu. It's called Solitaire. It's going to be a fantastic new advance. We're very excited about being in the clinical trial."

And patients are excited that three new life-saving procedures are FDA and Medicare approved, under a clause called the Humanitarian Device Exemption. Patients are flying in from all over the continent to see the neuroendovascular team based in Fort Myers. "We want to make this a national and international center for excellence," says Dr. Eskioğlu.

### New lung surgery technique

When it comes to body parts that most people don't want "opened," the skull is going to rank pretty high. Also topping the "I'd rather not" chart would be having one's chest wall opened and then having the ribs pushed aside, so a physician can remove part of a lung. Patients of Dr. Paul DiGiorgi at Gulf Coast Cardiothoracic Surgeons, avoid that painful scenario when he performs what's known as a VATS lung lobectomy.

Like the Onyx and coil procedures,

VATS (video-assisted thoracoscopic surgery) also utilizes a small camera. Making only a one-half inch long incision, Dr. DiGiorgi gets a detailed look around a patient's troubled lung via his camera and a large high-definition monitor. He then gets to work the same way, guiding his surgical tools by what the scope shows him. An open thoracotomy, in contrast, requires a surgeon to make a 5- to 15-inch incision in between the ribs on the side of the chest wall, extending to the back, "And you do all your work through that one incision," says Dr. DiGiorgi. "You can actually put your hand inside the chest, and see in, also." Surgeons approaching the lungs this way must cut through muscle, then use a rib spreader, which is exactly what it sounds like. Of the ribs being 'spread,' the doctor says matter-of-factly, "Sometimes they break."

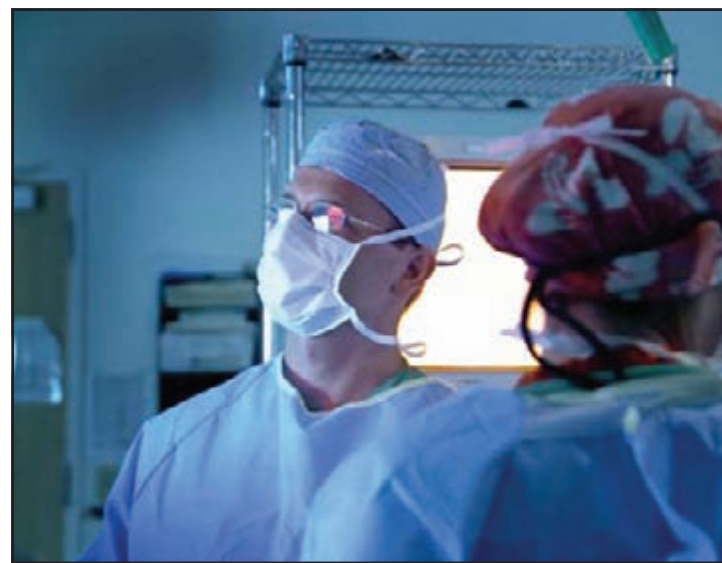
"When doing the minimally invasive procedure," he says, "we don't make a single large incision, we make four tiny incisions that don't even add up to half of the other. But we're also not placing a rib spreader, which pinches the nerve and causes a lot of pain." Before the VATS technique was developed, surgeons were cutting the muscle of the back that comes around to the side. "Every time you'd raise your arm or move your shoulder, you'd feel all that," says Dr. DiGiorgi. So by avoiding all that, patients bounce back faster.

"I don't miss having my hands in there," says the doctor. "You can drive the scope to locations that are hard to get to. With a single incision, you're limited. Now, I can drive the camera anywhere I want. It's even angled at 30 degrees so you can see to the side. It really enables you to do a lot of

things that you can't do 'open.' You'd need a huge incision to see what you see. It kind of puts you inside the chest."

The benefits of Dr. DiGiorgi's less-invasive procedure are enormous. "It decreases infectious complications because patients have smaller incisions, and they heal a lot faster," he says. The risk of infection is about half of what it used to be, especially for pneumonia, he explains. And patients can take a deep breath faster. "If you don't take deep breaths, your lungs start to collapse," he says.

The VATS procedure is catching on now that the benefits have been proven. Sadly, only about 25 percent of the cases



Dr. Paul DiGiorgi, at Gulf Coast Cardiothoracic Surgeons, has developed a less-invasive lung surgery technique.

that could be done this way actually are; a lot of unnecessary pain, but few surgeons are trained in the procedure. Southwest Floridians are enormously lucky to have the option at HealthPark. Despite the demands of a very serious profession, Dr. DiGiorgi has an easy-going manner and easily elicits smiles from his patients. When asked if watching the scope's-eye view of the lungs on high-def reminds him of the 1966 sci-fi film "Fantastic Voyage," he laughs and says "Yes, you're kind of 'miniaturized.' But no one can forget Raquel Welch. That's why I remember that movie." ■