UC Health Brings Heart Transplant Surgery Back to Cincinnati

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Asthma & Chronic Migraines

New research shows that pre-existing asthma is a strong predictor of future chronic migraine attacks in individuals who experience occasional migraine headaches.

The study was conducted by researchers from the University of Cincinnati College of Medicine, Montefiore Headache Center of the Albert Einstein College of Medicine in New York and Vedanta Research of North Carolina. Findings were published in the journal *Headache*, a publication of the American Headache Society.

“I noticed that many of my migraine patients also had asthma, which led me to believe that a relationship might exist,” says Vincent Martin, MD, a UC Health migraine specialist, co-director of the Headache and Facial Pain Program at UC Neuroscience Institute, professor of medicine for the UC College of Medicine and lead author of the study.

A large group of individuals from across the country were interviewed via questionnaires over the course of two years. “What we discovered from our 4,500 participants was that those with asthma were 60 to 80 percent more likely to develop chronic migraines one year later,” says Dr. Martin.

Asthma is proving to be a stronger predictor of chronic migraines than depression.

Inflammation

Both asthma and migraines share a culprit: inflammation—within blood vessels for migraines and in the airways for asthma sufferers. Mast cells (a type of white blood cell found in connective tissue) are part of the allergic response and could be releasing inflammatory chemicals that might trigger migraines, Dr. Martin says.

Allergy Shots

Another study also conducted at UC found that patients with hay fever were particularly susceptible to more frequent headaches. “When patients received allergy shots for hay fever, it blunted the allergic response of the immune system and those people tended to have a 50 percent reduction in the frequency of their migraines,” says Dr. Martin. “A plan of action would be to treat their allergies more aggressively or to prescribe preventive medications for migraines at an earlier stage.”

Neurological Source

Another possible origin for the correlation is neurological, as over-activity of the autonomic nervous system is present in people who suffer from both asthma and migraines. Shared environmental factors, such as air pollution, which are known to trigger both migraine and asthma attacks, are also likely to play a role.

LINX Device Transforms Patient’s Severe GERD

Extreme, chronic Gastroesophageal Reflux Disease (GERD) affected every facet of Marsha McQueen’s life, “I realized something had to be done because this wasn’t living,” said Marsha.

When she read about the new LINX Reflux Management System in *Discover Health* magazine, Marsha knew she had found a solution.

LINX is a quarter-sized chain of magnetic beads strung together by a titanium cord. Implanted around the lower esophageal sphincter, the LINX device allows a weak or dysfunctional valve to remain closed, preventing reflux. The beads easily separate, however, to allow the valve to open for the normal occurrences of swallowing and burping.

Valerie Williams, MD, a UC Health thoracic surgeon and assistant professor of surgery for UC College of Medicine, performed Marsha’s LINX procedure. Marsha, an elementary school teacher in Oxford, didn’t have the energy to interact with her students before the procedure.

“Now I can go outside and play with my students without vomiting and my breakfast no longer consists primarily of pills. I’m happier and feel better than I have in years,” Marsha says.

Implantation of the LINX device is a minimally invasive procedure and most patients return home the same day. Dr. Williams will always remember the conversation she had with Marsha after she had eaten her first meal about six hours after the procedure.

“Marsha stood up, opened her arms and asked for a hug. She said that she had already noticed she felt better because she’d eaten and no food had come back up,” says Dr. Williams. “It’s incredibly rewarding to help Marsha, and others, experience such an impactful life change.”

To make an appointment with a UC Health headache specialist, visit UCHealth.com/headache-facial-pain or call (513) 475-8730.

To make an appointment with a thoracic surgeon who performs the LINX procedure, call UC Health Digestive Diseases at (513) 475-8787.
Breathing is an automatic function that we often take for granted—until it becomes hindered.

At just 38 years old, Traci Altizer experienced a rapid decline in her ability to breathe and subsequently, in her quality of life. Traci’s breathing problems started more than a decade ago, steadily worsening until medication and inhalers no longer worked. She had been inaccurately diagnosed with poorly controlled asthma, and her medications were progressively increased as much as possible. This is a common situation, in which many patients with this condition find themselves until they are properly diagnosed.

A special education elementary school teacher, Traci found herself unable to work, sequestered at home with oxygen, with a CPAP (continuous positive airway pressure) machine and escalating steroid medications.

“I couldn’t even perform simple household tasks like washing dishes and doing laundry because it would wear me out,” says Traci. “My husband had to check on me at night because he was worried that I might choke or be smothered while I slept.”

Traci was diagnosed with tracheobronchomalacia (also known as TBM), a rare condition where the windpipe drastically weakens until the walls collapse upon breathing.

“The airway is designed to react with reflexes whenever it becomes irritated, so when excessive mucus accumulates in the airway, it triggers a cough or sneeze,” says Julian Guitron, MD, a UC Health thoracic surgeon and an assistant professor of surgery for UC College of Medicine. “Traci’s reflexes were triggered so drastically because of her windpipe collapse and mucus that she suffered several rib fractures from the bouts of coughing.”

After six months of preparation, Traci underwent the first tracheobronchoplasty (TBP) surgery in the region at UC Medical Center.

“Traci was cared for by a phenomenal multidisciplinary team,” says Dr. Guitron. Valerie Williams, MD, a UC Health thoracic surgeon, performed a “fundoplication procedure” (the upper part of the stomach is wrapped around the lower end of the esophagus, reinforcing the closing function of the lower esophageal sphincter) four months before the tracheobronchoplasty to diminish gastroesophageal reflux.

Sadia Benzaquen, MD, a UC Health interventional pulmonologist and assistant professor for the UC College of Medicine, placed a “Y” stent in order to give the airway the rigidity it was lacking as a test.

“After the device was placed, Traci reported a dramatic improvement in her symptoms, and therefore, we knew she would respond well to the tracheobronchoplasty,” says Dr. Guitron.

Although Traci was nervous about the procedure, she says her doctors helped her feel at ease by talking with her numerous times before the surgery. “Dr. Guitron walked me through the risks, saying, ‘You’re weighing these odds against your quality of life’ and I said, ‘What quality of life?’”

Traci’s symptoms diminished immediately following the six-hour surgery where Dr. Guitron and a surgical team rebuilt her airway using mesh material.

“I’m teaching again and I have more energy than I’ve had in years,” says Traci. “I am a brand new person. I had no idea I could feel this good.”
Fifty-year-old David Waits knows all too well what it’s like to lie in a hospital bed, day after day, hour after hour, waiting for a perfect heart donor match. From October 2015, through January 2016, Waits wondered if he’d get a new chance at life. Today, he wonders and waits no more. He received a heart transplant at UC Medical Center on February 2, 2016, and is steadily regaining his life.

“I’m a third generation heart disease patient. I’m lucky to be alive. Everyone tells me I’m a miracle. I shouldn’t be here. I guess God and my doctors at UC Medical Center thought differently,” says Waits.

Waits’ troubles began with a massive heart attack in December, 2014. Most people thought his troubles would end there, along with his life. “When one hospital thought he had acid reflux, we transferred to another hospital where the cardiac surgeon called Dr. Louis,” says his wife, Carol. Louis B. Louis, IV, MD, chief of cardiac surgery at UC Medical Center and assistant professor of surgery for UC College of Medicine, gathered a cardiothoracic surgical team and transferred Waits to UC Medical Center.

Once stable, Waits received a left ventricular assist device (LVAD) to support his heart function. UC Health advanced heart failure therapy cardiologists Stephanie Dunlap, DO, associate professor of internal medicine at the UC College of Medicine, and David Feldman, MD, PhD, professor of internal medicine, continued to care for Waits. However, Waits’ heart function deteriorated further. His only hope for recovery was a heart transplant. All he could do was wait for a perfect match.

And then the day arrived. On February 2, Waits received the news he had long awaited. A perfect match became available through LifeCenter, an organ procurement organization. Dr. Louis performed the eight-hour heart transplant surgery.

Carol is thrilled with David’s recovery. “The last 14 months have been hard, but when I look back at December 2014 – when I would thank God every night for giving me just one more day with David – I am overwhelmed with emotions,” Carol added.

Waits’ doctors continue to follow his recovery closely and are pleased with his progress. The wait is finally over. Waits is slowly becoming acquainted with his new reality – one filled with hope, health and gratitude.

To learn more about the UC Heart, Lung and Vascular Institute, please visit UCHealth.com/heart or call (513) 475-8521.
A new procedure is revolutionizing treatment for patients with severe aortic stenosis (narrowing of the aortic valve). The Transcatheter Aortic Valve Replacement (TAVR) program at the UC Heart, Lung and Vascular Institute is led by Satya Shreenivas, MD, a UC Health cardiologist, assistant professor for the UC College of Medicine and director of the UC Health Structural Heart Disease Program.

“Aortic stenosis is more prevalent as we grow older, with the incidence rising every decade of our life,” says Dr. Shreenivas. “Treatment has typically involved open-heart surgery; however, most patients are considered too high-risk for surgery.” In fact, 33 percent of high-risk patients over 75 years of age are not candidates for open-heart surgery.

TAVR involves placing a bio-prosthetic heart valve (animal tissue leaflets mounted on a metal frame) into the patient’s aortic valve by way of a catheter. The result is an extended life for patients without having to endure open-heart surgery.

“Now we have a procedure that takes less than an hour in the operating room,” says Dr. Shreenivas, “and patients can usually return home within 24 to 48 hours. TAVR has completely revolutionized the treatment of our patients with severe aortic stenosis.”

**MitraClip® MIRACLE**

Mitral regurgitation is a serious condition affecting the heart’s mitral valve, which is located between the heart’s two left chambers.

A properly functioning mitral valve ensures that blood flows in only one direction. Mitral regurgitation occurs when the valve fails to close completely and blood leaks backward inside the heart. Causes of this malfunction can be related to age, a congenital condition or underlying heart disease.

Mitral regurgitation is an extra burden for the heart and lungs and if left untreated, can cause life-threatening conditions. Treatment typically includes medication or open-heart surgery.

Fortunately, a less-invasive treatment is now available—MitraClip® transcatheter mitral valve repair (TMVR). A catheter transports the MitraClip® into the left atrium of the heart where it is positioned directly above the leaking valve. It then enters the left ventricle, below the valve leaflets, and the MitraClip® is retracted to clip onto the tissue leaflets. The clip moves with the valve, allowing blood to flow through two openings while reducing mitral regurgitation.

**Benefits include:**

- The procedure is less invasive than traditional open-heart surgery;
- Patients are usually released from the hospital within two to three days;
- Patients typically experience improvement in symptoms and quality of life shortly after the MitraClip® procedure;
- The MitraClip® procedure is included in the new medical guidelines for treating mitral regurgitation.

**Anatomy of the Human Heart**
“I then advise patients to eventually cut out animal-based protein. Once a person has completed a couple weeks of a vegetarian diet, they can work on the whole-food aspect of trying to stay away from preservative-laden, processed foods.”

**WHAT ARE SOME POSITIVE OUTCOMES OF A WHOLE-FOOD, PLANT-BASED DIET?**

“A recent study in *Journal of the American Medical Association: Internal Medicine* assigned about 4,000 women to implement either a Mediterranean diet (primarily plant-based foods, such as fruits and vegetables, whole grains, legumes, nuts and olive oil) or a low-fat diet. The follow-up revealed a 62 percent lower risk of developing breast cancer for individuals on the Mediterranean diet than those on the low-fat diet.

“Imagine if we had a drug with those results. This is simply a Mediterranean diet with whole grains, nuts, legumes, fruits, vegetables, olive oil and a small amount of fish.”

**HOW DO YOU RESPOND TO CRITICS?**

“The biggest issue is that it does take extra effort, and it is simply an adjustment. If you have heart issues, it’s a given that you should not be eating red meat; if you have diabetes you know you shouldn’t eat sugar; however, if you have a family history of cancer, no one is saying ‘You shouldn’t eat meat.’ Oncologists need to present this data to their patients. An oncologist has great power in influencing patients’ decisions, which could positively affect hundreds of lives including friends and family members. A whole-foods, Mediterranean diet has limited toxicity, unlike chemotherapy medications. I believe patients should receive the best medical treatment, including chemotherapy if needed, but I recommend adopting the appropriate lifestyle changes to help them feel better and fight cancer cells.”

**WHAT ARE THE FACTS ABOUT RED/PROCESSED MEAT AND CANCER?**

“Most GI (gastrointestinal) cancers, including colorectal and gastric, are affected by meat in two ways: First, people who eat a lot of processed meat aren’t getting enough fiber in their diet which results in irritation of the gut. They aren’t eating enough fresh fruit and vegetables, which are anti-carcinogens, or substances that inhibit the development of cancer. We don’t have a protein deficiency in this country, we have a fiber deficiency. Secondly, the processing of meat, whether using nitrates, curing or cooking at high temperatures, are all carcinogenic (cancer-causing) processes.”

**HOW MUCH MEAT IS SENSIBLE TO EAT?**

“At first, an entirely whole-foods, plant-based diet isn’t realistic for some people. I recommend incorporating an 80/20 diet; 80 percent whole grain, fruit and vegetables and 20 percent animal-based proteins, dairy, sugar and flour.
Scott Badzik was working his dream job as a commercial airline pilot 10 years ago when his life was changed by epilepsy. After coming home from a long run, he complained of nausea, and then collapsed with a grand mal seizure.

Scott, 33, would never fly again. “When you go from flying a $50 million airplane to being on a leash and people knowing where you are at all times, it’s a bruise to your ego,” he says.

Fortunately, Scott had a loving and supportive family. He also had access to the UC Epilepsy Center where a multidisciplinary team worked hard to understand his seizures and to maximize his independence and quality of life. By mapping his seizures while he stayed overnight in the Epilepsy Monitoring Unit, the team discovered that the lesion causing the seizures was located within the folds of the occipital, parietal and temporal lobes of his brain. Scott’s epilepsy was complex. While it could be tamed, it probably could not be cured.

Under the care of David Ficker, MD, a UC Health epileptologist and associate professor of neurology for UC College of Medicine, Scott now takes a medication that has eliminated the grand mal seizures that can lead to loss of consciousness. However, no medication has eliminated the complex partial seizures that occur about twice a week or the simple partial seizures that occur multiple times each day.

“We have struggled with balancing seizure control and cognitive side effects of seizure medication,” Dr. Ficker says. “However, over the years, we have succeeded in placing Scott on a medication that allows for better seizure control and enables him to live a more normal life. That includes running marathons.”

Four years ago, Scott began running again with his son at an after-school running club. A year later, he was running races. Marathons followed. Running made Scott happy, reduced stress and reduced his seizures.

Before the 2015 Flying Pig Marathon, Scott briefed his pace team about his epilepsy.

“I explained what my seizures looked like and asked them to just keep me pointed in the right direction. I had a complex at mile two and I think everyone relaxed once they saw what one looked like. My second complex was around mile 10. The touching part about this one was, once I started to feel better, I realized the other runners had made a protective circle around me.

“The people in my pace group all went home that day with a completely different perspective on epilepsy.”

-Scott Badzik

To learn more about the UC Epilepsy Center, visit UCepilepsyCenter.com or call (513) 475-8730.
Discover Health is a quarterly magazine published by University of Cincinnati Medical Center to provide accurate and timely health information. It is offered as a health education tool featuring news and stories centered around academic-based, discovery-driven health care—it is not a substitute for consultation with a personal physician. UC Medical Center is located at 234 Goodman Street, Cincinnati, OH 45219. For more information, call (513) 584-1000 or visit UCHealth.com. You can also like us on Facebook at Facebook.com/uchealthcincinnati or follow us on Twitter @UC_Health. If you do not wish to receive future issues of this publication, please email UCMC-PR-Marketing@UCHealth.com.

University of Cincinnati Medical Center is a health education and information resource for people in the Greater Cincinnati region. Events and activities listed in this calendar are held in various locations within UC Health facilities, unless otherwise noted.

- **RIDE CINCINNATI**
  Sun., June 12 – Yeatman’s Cove at Sawyer Point, 705 E. Pete Rose Way, Cincinnati, OH 45202. The 10th annual event takes cyclists of all ages on a scenic ride through Sawyer Point, over the Purple People Bridge and into Northern Kentucky. Proceeds benefit breast cancer research at UC Cancer Institute. For information, visit ridecincinnati.org.

- **ONCOFERTILITY EDUCATION EVENT**
  Mon., July 11, 6 to 7:30 p.m. – Cancer Support Community, 4918 Cooper Road, Cincinnati, OH 45242. This free event hosted by the UC Cancer Institute Survivorship Program is offered to patients, families and caregivers, and will feature a discussion about oncofertility and cancer. Call (513) 791-4060 to register.

- **SKIN CANCER EDUCATION EVENT**
  Mon., July 18, 6 to 7:30 p.m. – Cancer Support Community, 4918 Cooper Road, Cincinnati, OH 45242. This free community education event is offered to patients, families and caregivers and will discuss skin cancer and integrative medicine treatments. Call (513) 558-2030 to register.

- **AMERICAN CANCER SOCIETY PAN-OHIO HOPE RIDE**
  Thurs. through Sun., July 21 to 24
  UC Health is a proud sponsor of this 10th annual ride that takes riders from Cincinnati to Cleveland to help raise funds to finish the fight against cancer. For more information, visit Facebook.com/PanOhio.

- **PARKINSON’S DISEASE SUPPORT GROUPS**
  Meets the second Thursday of each month from 5 to 6:30 p.m. – UC Health Women’s Center Community Room, located on the fourth floor of the UC Physicians Office South building, 7675 Wellness Way, West Chester, OH 45069. Separate meetings for both patients and for caregivers are offered simultaneously. For information, contact Michanne Davis at michanne.davis@UCHealth.com or Julie Gohs at julie.gohs@UCHealth.com.

- **STROKE SURVIVORS SUPPORT GROUP**
  Meets the third Wednesday of each month from 7 to 9 p.m. – Daniel Drake Center for Post-Acute Care, 151 W Galbraith Rd, Cincinnati, OH 45216. This meeting provides support, fellowship and information to those people who have experienced a stroke.

- **ALLIES FOR HOPE & HEALING BRAIN TUMOR MENTORING PROGRAM**
  The UC Brain Tumor Center mentoring program, Allies for Hope and Healing, pairs patients with caring individuals who have coped with brain cancer firsthand or through the experiences of a loved one. Trained mentors provide support to patients who have been recently diagnosed. For information, or to be matched with a mentor, contact Jennifer.Ross@UCHealth.com or call (513) 584-7043.