

Aging population leading to more arrhythmia diagnoses

February 27 2014, by Stephanie Soucheray-Grell

Warning Signs of a Heart Attack ○ Uncomfortable pressure, squeezing, fullness or pain in the center of your chest, lasting more than a few minutes ○ Shortness of breath with or without chest discomfort ○ Abdominal discomfort that may feel like heartburn ○ Discomfort or pain in one or both arms, the neck, jaw, back or stomach ○ Breaking out in a cold sweat, nausea or lightheadedness



Craig Wilkins was feeling tired, breathless and in need of a vacation. Although he attributed his tiredness to too many long and hectic hours at the office, the 56-year-old decided to see his family doctor in Cary, N.C., before leaving for a family trip.

Craig was otherwise healthy and had no history of <u>heart disease</u>, but his doctor discovered he had <u>atrial fibrillation</u>, a condition that can cause the heart to race, sometimes beating hundreds of times in one minute. These episodes, called tachycardias, were making Craig feel fatigued.

An estimated 12 million people will have atrial fibrillation by 2050, according to the Centers for Disease Control and Prevention. Atrial fibrillation is a type of arrhythmia that causes the heart to beat irregularly. It can be genetic or caused by scar tissue on the heart, diabetes, high blood pressure or stress. An aging population, an increased survival rate following heart attacks and rising rates of heart disease mean more Americans will be entering their 60s and 70s with arrhythmias, which are a leading cause of stroke and cardiac events, and can dramatically alter a person's quality of life.

For some, atrial fibrillation is annoying but not life threatening. For Craig, the condition had gone undetected for so long that he had developed <u>congestive heart failure</u>. "I was shocked when the doctor told me how serious it was," says Craig.

Initially, Craig was given a course of blood thinners to prevent clots that could be lethal, followed by a cardioversion, an electrical shock to the heart, to reset the heart beat back to normal. Though this worked initially, his heart eventually returned to the abnormal heartbeat. After several attempts at cardioversion, Craig's doctor tried anti arrhythmia medication.

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says Craig, who stayed in the hospital for three days as doctors watched his heart. Two days after he was released, he returned to work and passed out at his desk.

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Andy Kiser, MD (left), with Paul Mounsey, MD Courtesy Donn Young



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Dr. Mounsey performed a cardiac ablation on Craig's heart. In an ablation, doctors thread catheters through the arteries to the heart and use radiofrequency to destroy the damaged heart tissue causing the atrial fibrillation. Ablations are often successful, but in Craig's case, a flutter continued even after the procedure. A second ablation was performed, but the location of where the flutter was originating meant ablation could not correct it.

Dr. Mounsey then collaborated with Dr. Kiser to perform the Convergent Procedure.

Traditionally, surgeons, like Dr. Kiser, have created scar pat- terns to disrupt the circuitry that causes atrial fibrillation arrhythmia, while electrophysiologists, like Dr. Mounsey, have performed ablations. With the Convergent Procedure, Drs. Mounsey and Kiser work side by side using miniature cameras, small catheters and electrodes to map out an



individualized pattern that will work to reestablish normal rhythms in each patient.

Drs. Mounsey and Kiser have been performing the procedure since 2011, and they recently completed their 100th surgery. They have an 80 percent success rate, which is extremely high for complex arrhythmias.

Five years after Craig's initial atrial fibrillation diagnosis and a year and a half after having the Convergent Procedure, he says his health is excellent. "I can't believe how bad I used to feel," says Craig. "I have energy and a desire to do things now."

Craig felt so good, he left his IT job behind and made a career change, opening The Meat House, a neighborhood butcher and grocery franchise in Raleigh and Cary.

Craig's case is a good example of the patients who will benefit most from the UNC Heart & Vascular Network. Patients who live in the Raleigh area and their primary care physicians will have access to a group of cardiologists and services in their local communities, and for the most complex cases, they will have access to the leading research, technology and specialty care available at UNC Health Care.

With the creation of this new network, Drs. Kiser and Mounsey will work alongside Sidharth Shah, MD, a cardiac electrophysiologist in Raleigh. Dr. Shah performs cardiac ablations and works with cardiac devices, such as pacemakers and cardio defibrillators, and his work is closely associated with research opportunities and clinical trials.

"In the past we had to send our patients who were in the UNC or Rex system to other centers," says Dr. Shah. "Now, we can keep them close to home."



Provided by University of North Carolina at Chapel Hill School of Medicine

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