Electrophysiology Procedure Cures Life-Limiting Arrhythmias

Patient Gets New Lease on Life

By: Roxanne Jones

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Shawn Robinson, 34, had occasional heart palpitations for as long as he could remember.

“They’d last just a few seconds,” the Blythe resident says. “I thought it was normal.”

Over time, however, they became more frequent and prolonged. He was discharged from the Navy because of them. And during the past three years, they began to be debilitating. On more than one occasion, he went to his local emergency room where his heart rate was measured at 170 beats per minute (a normal heart rate is 60 to 100). He also began to experience lightheadedness, weakness, chest pain and breathlessness.

“I’d have to leave the gym or work, go home and just lie down and try to breathe when the

palpitations happened," Robinson relates. "It got so that I was having strong episodes that lasted five or ten minutes almost weekly. I worried about it all the time."

As a child, Robinson was told he had a heart murmur. When he got older, his palpitations prompted a diagnosis of an anxiety disorder that affected his heart rhythm, and he took medications to manage it. But as Robinson's symptoms worsened, his cousin searched the Internet for physicians specializing in heart rhythm disorders and found Leon Feldman, MD, FACC, Co-Director Electrophysiology (EP) Lab and Arrhythmia Center, and Cardiology Section Chief at Eisenhower Medical Center.

And Robinson finally got some answers — and relief.

"Mr. Robinson had Wolff-Parkinson-White syndrome," Dr. Feldman explains, referring to a congenital (present at birth) condition in which there is an abnormal electrical pathway — called an accessory bypass track — in the heart that triggers periods of tachycardia (very fast heartbeat). "It's not unusual for WPW to be underdiagnosed because the palpitations may be transient."

The good news is that WPW is quite treatable, and with very good results.

"We brought him into the EP lab to locate the bypass tract and eliminate it using radiofrequency [RF] energy, preventing it from conducting electrical impulses," Dr. Feldman says. "We used traditional and three dimensional mapping to locate it and deliver the RF energy. This required placement of four catheters, one from the internal jugular vein on the high right neck, two from the right groin femoral vein and a fourth in the femoral artery which were advanced into the left heart under X-ray guidance.

"What made the procedure more complicated was that Mr. Robinson had a bicuspid aortic valve," he continues, referring to a congenital abnormality in which the aortic valve has only two leaflets instead of the normal three. This is what Robinson had been told was a heart murmur. "He will ultimately need to have that valve replaced, but we're hoping it won't be for another 15 to 30 years."

What's more, following the first ablation, Dr. Feldman discovered that Robinson had a second arrhythmia called atrial flutter, which required a second ablation.

"This was essentially a birth defect using a pathway on the other side of the heart," he explains. "Anytime Mr. Robinson's first arrhythmia would start, it would change into atrial flutter. So the procedure turned out to be ablation of two separate arrhythmias." Dr. Feldman saw Robinson for a one-week post-procedure follow-up and again after four months to evaluate the efficacy of the treatment.

"He's had no recurrence of either arrhythmia," Dr. Feldman says. "This procedure is considered a permanent cure, and at this point he requires no regular medical treatment. Palpitations are often benign, but need to be evaluated. Many of the arrhythmias that produce ongoing symptoms are curable."

The procedure greatly improved Robinson's quality of life. "It's rare to have sudden cardiac arrest with WPW," Dr. Feldman says. "However, recurrent arrhythmia with rapid heart rates can lead to cardiomyopathy and eventual heart failure. And it most commonly leads to multiple emergency room visits and lifestyle restrictions out of fear of triggering the arrhythmia."

"Also, in older years, untreated atrial flutter can lead to stroke," he notes. "So we treated all these potential issues in one setting. Plus, this patient had been on high-dose medications with significant side effects, to which he's no longer subjected."

"I wasn't diagnosed with WPW until I saw Dr. Feldman," Robinson says. "Thanks to him, I

definitely have a new lease on life. I can go out and not worry about palpitations happening when I do something physical. I don't worry all day about what I have to avoid to keep it from happening. I feel a ton better."

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