

Landmark heart treatment study

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Treating a common heart rhythm disorder by burning heart tissue with a catheter works dramatically better than drug treatments, according to a landmark study published in the Jan. 27 issue of the *Journal of the American Medical Association (JAMA)*.

One year after undergoing a treatment called catheter ablation, 66 percent of patients with an irregular heartbeat called atrial fibrillation (A-Fib) were free of any recurrent irregular heartbeats or symptoms, compared with only 16 percent of those treated with drugs. Results were so convincing the trial was halted early.

The study's lead researcher is Dr. David Wilber, director of the Cardiovascular Institute at Loyola University Chicago Stritch School of Medicine.

More than 2 million Americans have atrial fibrillation, and there are about 160,000 new cases each year. The number is increasing, due in part to the aging population and the [obesity](#) epidemic.

Patients receiving ablation reported immediate and major improvements in their quality of life, which were maintained over the nine months they were followed. There were no significant quality-of-life improvements among patients who received drug therapy.

The study included 167 A-Fib patients who had failed at least one drug. Researchers randomly assigned 106 patients to receive ablation and 61 patients to try a different medication than the one they previously failed.

Patients came from 19 centers, including 15 centers in the United States. The average age was 55 years; 33.5 percent were women. On average, patients had experienced A-Fib symptoms for 5.7 years and had failed 1.3 drugs before entering the study.

A-Fib is the most common form of [irregular heartbeat](#). Electrical signals, which regulate the heartbeat, become erratic. Instead of beating regularly, the upper chambers of the heart quiver. Not all the blood gets pumped out, so clots can form. A-Fib can lead to strokes and heart failure.

A-Fib patient Robin Drabant, 36, of Hanover Park, Ill., said the condition once "made me feel like I was 90 years old with a failing heart." She was taking a maximum dose of an A-Fib medication, which caused fatigue and weight gain. But even while taking the drug, she still had episodes almost every day, lasting from 10 seconds to an hour or longer. "I would lose my breath and could feel my heart racing and fluttering," she said.

Since Wilber performed a catheter ablation on Drabant in May, 2008, she has had no more A-fib episodes. "I had great results," she said.

A-Fib symptoms include heart palpitations, dizziness, chest pain, fatigue, shortness of breath, fainting and lightheadedness. "A lot of people are disabled," Wilber said. "They have no energy. They can't work. They have a very poor quality of life."

Drugs such as beta blockers and calcium-channel blockers can slow the heart rate during an A-Fib episode. Other drugs, such as flecainide and propafenone, can help maintain a normal rhythm. But even when medications succeed in maintaining a normal heart rhythm, the drugs' side effects can significantly impair patients' quality of life. When drugs don't work or produce unacceptable side effects, alternative treatments

include surgery or [catheter ablation](#). While drugs have been available for 30 or 40 years, ablation is a relatively new treatment.

In the ablation procedure, an electrophysiologist destroys areas of [heart tissue](#) that are responsible for the erratic electrical signals. A catheter (thin flexible tube) is guided through blood vessels to the heart. The tip of the catheter delivers radiofrequency energy that heats and destroys tissue.

Possible adverse effects include irritation of the lining of the heart, fluid in the lungs or around the [heart](#), bleeding, clots and stroke. However, there were no major adverse events in the trial.

"If you choose an experienced center for your procedure, you should get the kind of results we found in this study," Wilber said. Loyola physicians perform about 500 ablations per year, making Loyola one of the highest-volume centers in the Midwest.

Provided by Loyola University Health System

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