

A brand-new technology is available for Chicago area patients living with Atrial Fibrillation (AFib).

FARAPULSE is an FDA-approved cardiac ablation treatment, designed by Boston Scientific, to restore and regulate heartbeats and slow the progression of AFib. Now, it's available in the newly opened Electrophysiology (EP) Lab within OSF HealthCare Little Company of Mary Medical Center.

It's referred to as a pulsed field ablation, delivering energy to the cardiac tissue that doesn't injure surrounding tissue.

"It's completely selective to the cardiac myocytes we're targeting to treat AFib," says Dr. William Spear, the lead electrophysiologist at OSF Little Company of Mary Medical Center in Evergreen Park, Illinois. "You deliver the energy, which only takes two and a half seconds, and it targets just the cardiac cells you're focusing on, those abnormal cells that are causing the Atrial Fibrillation (AFib), and it leaves all the other cells around it untouched."

AFib is very common, affecting around 2.7 million Americans, according to the [Delaware Journal of Public Health](#), with an estimated 160,000 new cases each year. Symptoms of AFib include shortness of breath, heart racing, or if you can't do activities you used to be able to do. It's when the normal rhythm of the heart is disrupted, and the top chamber of the heart, called the atrium, begins to quiver. When this happens, it makes the heart beat 300-400 times a minute and also results in a very rapid and irregular heartbeat in the bottom chamber, decreasing the efficiency of the heart pump. This can lead to blood stagnating in the upper chamber, then clots can form, leading to stroke, heart failure, or even death.

Dr. Spear calls the new FARAPULSE service "revolutionary." He adds all the adjacent tissues like nerves, the esophagus or lungs, won't be damaged in the procedure.

"For the last 20-30 years, the mainstay of ablation has been radio frequency. Radio frequency is very good, but it's more traumatic to the tissue because you're actually burning the tissue," Dr. Spear says. "With pulsed field ablation, it really leaves the esophagus untouched. We can ablate around the esophagus where the heart meets the esophagus on the posterior side, without having to worry about this major complication which is called atrial esophageal fistula (AEF). This happens because we're not touching the esophagus, we're only touching cardiac tissue."

Tracy Jendruczek, the Vice President of Surgical and Procedural Services at OSF Little Company of Mary, says FARAPULSE will help community members in nearby areas living with AFib.

"If patients are experiencing any heart concerns or issues they should see their medical provider. From there, a cardiologist will be able to determine if ablation is appropriate for them. If appropriate, FARAPULSE is just another technique to ablate, to help the heart beat normally," Jendruczek says. "It's a safer technique in that it preserves tissue around the heart, compared to current techniques being used for ablation."

"It's a very serious problem that faces millions and millions of patients," Dr. Spear says. "As we age, it becomes more and more frequent. As you get into the 70-80-year range, about 20-25% of patients will develop atrial fibrillation at some point in their life. It's a very serious problem we face as a society, really."

Dr. Spear notes that many individuals who have AFib are asymptomatic. He says this is a reminder to keep an eye on your overall health, speak with your medical provider, and schedule an appointment with a cardiologist if recommended by your primary care physician.

The FARAPULSE PFA procedure usually takes less than one hour and allows most patients the ability to return home that day.