AF is a cardiac arrhythmia affecting an estimated 2.7 million Americans, according to the American Heart Association. AF patients with symptoms, such as fatigue or shortness of breath, may be candidates for the hybrid maze procedure, as may those who do not desire or cannot tolerate medical therapy.

Wide-Ranging Benefits

In addition to the freedom from AF that the majority of patients who undergo the procedure enjoy, they experience other substantial — and even lifesaving — medical benefits.

Of particular significance, they face a markedly decreased risk of stroke. During the hybrid maze, Dr. Lee removes the atrial appendage — where blood pools and clots when not successfully pumped out of the heart. When the clot breaks off, it can cause a stroke. With removal of the atrial appendage, the risk of stroke is decreased, and patients are less reliant on anticoagulants such as aspirin, heparin or warfarin.

Additionally, because Dr. Lee performs the hybrid maze procedure using minimally invasive instrumentation such as cameras and bipolar radiofrequency energy, there is no need for sternotomy. Thus patients can return to everyday activities much more rapidly than would be possible after open-heart surgery and the months-long healing it typically requires.

“With the minimally invasive approach, they’re still in the hospital for a few days following the procedure, but there are no restrictions on their activity at all,” Dr. Lee notes. “Patients can do whatever they can tolerate.”

Restoring Electrical Order

Dr. Lee likens AF’s electrical disruption to waves formed by simultaneously throwing 100 rocks into a pond. Maze procedures corral this electrical chaos.

“The maze makes a series of dams in the middle of the pond,” Dr. Lee explains. “It makes small scars in the atrial tissue in a pattern like a maze all over the atrium that direct the electrical current through the borders of the scars, from the sinoatrial node to the atrioventricular node, so that no matter where the rock is thrown into the pond, the current is fixed to the two borders.”

Avoiding Needless Procedures

Through small incisions in the chest, Dr. Lee accesses the heart and uses bipolar radiofrequency ablation to create part of the maze, while the heart continues to beat. This stage of the procedure effectively allays AF symptoms for two-thirds of the patients who choose the treatment. When symptoms persist, an electrophysiologist performs a second stage after six weeks to two months. Gaps in the initial scar tissue barriers are repaired with catheter ablation, and more scarring is created on the interior of the atria.

But that fortunately is unnecessary in most cases, Dr. Lee notes. “Many patients are told they need to ‘just live with their AF,’” he says. “That is simply not the case. This new procedure offers AF patients the opportunity for a life free from AF, stroke and anticoagulation.”

For information about SLUCare — The Physicians of Saint Louis University, visit slucare.edu. To refer a patient to Richard Lee, M.D., contact the Center for Comprehensive Cardiovascular Care at (314) 977-4440, or visit sluheart.com.

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