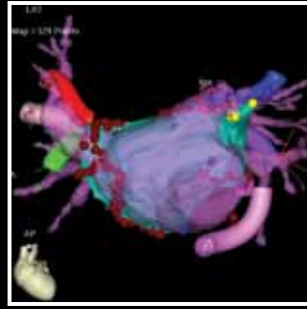


Treating Atrial Fibrillation

continued from front

Emory electrophysiologists performed the ablation using conscious sedation and femoral vein access with trans-septal catheterization into the left atrium. The procedure consisted of a hybrid ablation procedure combining



pulmonary vein-left atrial electrical isolation and wide-area circumferential ablation around the right and left pulmonary vein antra. Electro-anatomic mapping guided the irrigated-catheter ablation system.

The procedure took less than three hours. After monitoring him overnight, we discharged the patient home the next morning on warfarin anticoagulation. We maintained him on anti-arrhythmic drugs for one month following the ablation. He returned to normal activity two days after discharge.

Interrogation of his pacemaker at three and six months following ablation demonstrated absence of any atrial arrhythmia. Thus, after confirming complete absence of AF at the six-month visit, we discontinued warfarin anticoagulation since he was at low risk for stroke with a CHADS2 of 1 and was free of AF. He now feels “great” and has none of the symptoms he experienced over the previous two years.

Catheter ablation has proven to be a reasonable alternative for patients with symptomatic AF in whom anti-arrhythmic drugs have failed. The procedure works best in patients with recurrent, episodic AF, but also may be beneficial for patients with persistent AF without significant heart disease. Recent pilot studies comparing catheter ablation to medication as primary therapy for AF suggest superiority of ablation in the initial treatment of recurrent AF. Patients at low risk for stroke as a result of AF may stop warfarin following ablation, but the discontinuation of anticoagulation requires individual evaluation by the electrophysiology/cardiology team caring for the patient.

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Treating Atrial Fibrillation – A Surgical Approach

Emory surgeons have performed almost 500 surgical ablations for atrial fibrillation, including numerous totally thoracoscopic mini-Maze procedures. This procedure involves totally endoscopic bilateral pulmonary vein isolation using bipolar radiofrequency energy and stapled occlusion of the left atrial appendage.

Our very first case was a 46-year-old woman with a history of seven years of disabling symptoms of paroxysmal AF. Her symptoms were interfering with her personal life and job performance, resulting in “zero quality of life.” She failed numerous medication trials and had a variety of negative reactions to various anti-arrhythmic medications. She had undergone two out-of-state percutaneous catheter ablations and was not interested in a third.

To learn more about this patient’s totally thoracoscopic mini-Maze procedure and outcome, visit www.emoryhealthcare.org/heartblog.

The Chamber

Heart & Vascular Innovations at Emory
August 2010

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Treating Atrial Fibrillation – A Catheter Ablation Approach

A 55-year-old school administrator in Georgia developed atrial fibrillation (AF) in the absence of any overt heart disease. His arrhythmia proved quite symptomatic over a two-year period, including fatigue, shortness of breath and decreased exercise tolerance.

His local physicians attempted to restore and maintain sinus rhythm with the use of cardioversion and trials of sotalol, and later with propafenone, in conjunction with cardioversion. When he developed bradycardia on the anti-arrhythmic drugs, the patient underwent a pacemaker implant to allow continued use of the drugs.

The recurrence of AF signaled the failure of drug therapy. As a result, his physicians decided to pursue rate control and anticoagulation therapy. In this case, the rate control strategy proved unacceptable, as the patient’s symptoms continued and greatly impacted his quality of life.

His local cardiologist then referred him to Emory University Hospital Midtown for evaluation of catheter ablation as an option to eliminate his AF. He underwent catheter ablation of his arrhythmia in February 2010.



continued inside

The Emory Atrial Fibrillation Program Team

Our physician team provides services at both Emory University Hospital and Emory University Hospital Midtown.

Electrophysiologists

David DeLurgio, MD
Mikhael El Chami, MD
Michael Hoskins, MD
Jonathon Langberg, MD
Angel Leon, MD
Michael Lloyd, MD

Cardiothoracic Surgeons

Ed Chen, MD
Robert Guyton, MD
Michael Halkos, MD
Omar Lattouf, MD
Duc Nguyen, MD
John Puskas, MD
Vinod Thourani, MD
David Vega, MD

The Chamber is a bimonthly publication. If you would like to receive *The Chamber* or would view previous issues of *The Chamber*, visit www.emoryhealthcare.org/heartmedicalprofessionals.

Emory Heart & Vascular Center Transfer Service:
404-778-4930 or 800-43-HEART

Emory Physician Consult Line:
404-778-5050 or 800-22-EMORY

Emory HealthConnectionSM:
404-778-7777 or 800-75-EMORY

Emory's Heart & Vascular Center is consistently ranked as one of the nation's leading Heart and Vascular Centers by *U.S. News & World Report*.

Telehealth Services

Emory Heart & Vascular Center cardiologists and cardiothoracic surgeons are available for Telehealth consultations Monday through Friday. To schedule a consultation, call the Georgia Telehealth Scheduling Line at **866-754-HEAL (4325)**. To learn more about our Telehealth program, visit www.emoryhealthcare.org/telehealth.

Research

The Emory Atrial Fibrillation Center is currently recruiting patients for WATCHMAN Left Atrial Appendage System for Embolic PROTECTION in Patients With Atrial Fibrillation. The WATCHMAN device is designed to be permanently implanted distal to the ostium of the left atrial appendage (LAA) to trap potential emboli before they exit the LAA.

Inclusion Criteria:

- Patient has paroxysmal, persistent or permanent non-valvular atrial fibrillation (AF)
- Eligible for long-term warfarin
- CHADS score ≥ 1 (congestive heart failure [CHF], history of high blood pressure, 75 years of age or older, diabetes, prior stroke or transient ischemic attack [TIA])

Exclusion Criteria:

- Contraindicated for warfarin
- Contraindicated for aspirin or clopidogrel (Plavix)
- CHF class 4
- Implanted mechanical valve
- Atrial septal or patent foramen ovale (PFO) device
- Platelets $< 100,000$ or hemoglobin < 10
- Left ventricular ejection fraction (LVEF) $< 30\%$

For more information, call the Emory Electrophysiology Clinical Research Department at **404-686-2504**.

Why Choose Emory?

Long steeped in a culture of bringing original ideas to the advancement of heart health, Emory cardiologists and cardiac surgeons continue to collaborate to improve efficacy and safety using our myriad of treatment options for varied patient populations.

Today, more than two million Americans have atrial fibrillation (AF), an increasingly common disease affecting both patient morbidity and mortality. To date, drug- and device-based treatments for AF are palliative, not curative. Emory physicians have challenged the idea that the progress of AF is inexorable and irreversible. In fact, Emory's AF specialists have treated more than 1,200 patients with catheter ablations and more than 500 with surgical ablation techniques.

Whether selecting a catheter or surgical approach to AF, the endpoint is to electrically isolate or eliminate the foci in the atrium that trigger AF. Overall treatment goals are to eliminate or reduce symptoms, to improve left ventricular function by restoring both electrical and mechanical atrial systole, and to reduce the risk of stroke.

Emory electrophysiologists and cardiac surgeons emphasize an integrated, collaborative team approach to provide the most appropriate treatment possible for each patient. Emory has experience and expertise in some of the most advanced treatments for AF, including the surgical thoroscopic mini-Maze procedure, which, due to its complexity, is performed in only a few medical centers in the United States.

For more information about Emory's Atrial Fibrillation Program, visit www.emoryhealthcare.org/afib or call the Emory Physician Consult Line at **1-800-22-EMORY** or **404-778-5050**.