

Transcatheter Therapy *continued from front*

The procedure consists of transcatheter implantation of a bovine bioprosthesis with a stainless steel frame (Edwards SAPIEN

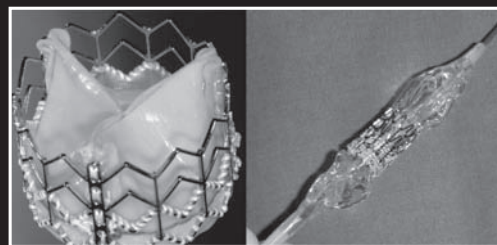


Figure 1: The transcatheter heart valve is as large as 26 mm in diameter when expanded (left) and as small as 8 mm when collapsed over a balloon catheter (right).

Transcatheter Heart Valve, Edwards Lifesciences, Irvine, CA; Figure 1) that displaces the diseased native aortic valve. To deliver the device, it is crimped onto a balloon delivery catheter to the width of a pencil and introduced through a small incision in the groin or between the ribs. Using ultrasound and X-ray guidance, the device is positioned and deployed at the level of the aortic annulus. As it expands, the new valve anchors onto and displaces the diseased native valve to restore normal blood flow (Figure 2). This procedure is performed without the utilization of cardiopulmonary bypass.

Approximately 85 patients have received the new transcatheter aortic valves at Emory since 2007. Emory is one of the five largest centers in the United States and the largest center in the Southeast to offer this investigational procedure. It is anticipated that the transcatheter valve will receive U.S. Food and Drug Administration (FDA) approval in late 2011. Emory expects to begin accruing patients for PARTNER II, a new randomized, controlled trial studying the SAPIEN XT Heart Valve, later this year.

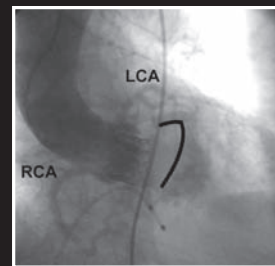


Figure 2: The valve stent frame following deployment. (LCA, left coronary artery; RCA, right coronary artery.)

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Meet the Newest Addition to the Emory Heart & Vascular Team

Anthony (Tony) Mirandi, MD

Practice Area: General Cardiology

Areas of Clinical Interest: Non-invasive cardiology, echocardiography, stress testing, nuclear cardiology

Primary Practice Location: Emory Heart & Vascular Center at Villa Rica, 705 Dallas Highway, Suite 201, Villa Rica, Georgia 30180

To speak with Dr. Mirandi or to refer a patient, please call 404-778-8440.

The Chamber is a bimonthly publication. If you would like to receive *The Chamber* via e-mail, please visit www.emoryhealthcare.org/structuralheart. To view the previous issue of *The Chamber*, visit www.emoryhealthcare.org/lvad.

The Chamber

Heart & Vascular Innovations at Emory
June 2010

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Transcatheter Therapy Expected to Transform Treatment of Aortic Stenosis

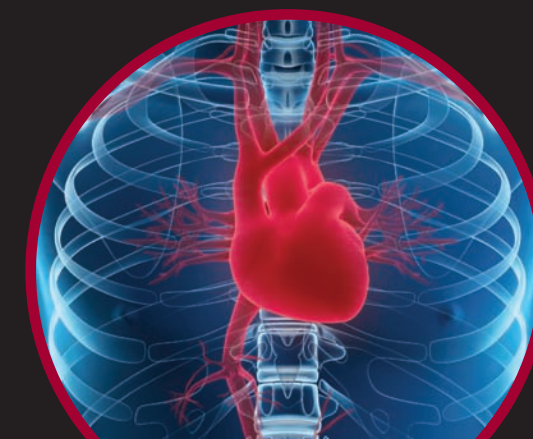
By Vasilis Babaliaros, MD, Assistant Professor of Medicine; Peter Block, MD, FACC, Professor of Medicine; Robert Guyton, MD, FACC, Professor of Surgery, Chief of Cardiothoracic Surgery, EMORY HEALTHCARE; and Vinod Thourani, MD, FACC, Assistant Professor of Surgery

Emory University Hospital is one of 20 sites nationwide, and the first and most comprehensive in the Southeast, to study transcatheter aortic valve implantation for aortic stenosis, a condition that affects tens of thousands of Americans each year.¹

Because the transcatheter procedure is easier on patients, with a substantially shorter recovery time than traditional surgery, it provides doctors with a new option to treat patients who are too ill or frail to endure cardiopulmonary bypass and median sternotomy. French cardiologist Alain Cribier, MD, performed the first transcatheter heart valve implantation in 2002.² Emory interventional cardiologist Vasilis Babaliaros, MD, trained under Dr. Cribier and helped bring the procedure to Emory.

A combined group of Emory cardiologists and cardiothoracic surgeons have been performing transcatheter aortic valve implantations since 2007 as part of the randomized, controlled trial comparing this procedure with traditional, open-heart surgery or medical therapy in high-risk patients with aortic stenosis.³

continued inside



The Structural Heart Physician Team

Interventional Cardiologists:



Vasilis Babaliaros, MD



Peter Block, MD, FACC

Cardiothoracic Surgeons:



Robert Guyton, MD, FACC



Vinod Thourani, MD, FACC

Interact with Emory physicians on the
Emory Heart & Vascular Center blog:

www.emoryhealthcare.org/heartblog

Telehealth Services

More than 20 credentialed and board-certified specialists and subspecialists at the Emory Heart & Vascular Center provide Telehealth services throughout Georgia. The Center's physicians have extensive experience in the diagnosis, treatment and research of cardiovascular disease and offer a full spectrum of care and treatment options for the most common to the most complex cardiac and vascular conditions.

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 or to locate the presentation site nearest you, visit www.emoryhealthcare.org/telehealth.

References:

1. Stewart BF, Siscovick D, Lind BK, et al. Clinical factors associated with calcific aortic valve disease. *J Am Coll Cardiol.* 1997;29(3):630-634.
2. Cribier A, Eltchaninoff H, Bash A, et al. Percutaneous transcatheter implantation of an aortic valve prosthesis for calcific aortic stenosis: first human case description. *Circulation.* 2002;106(24):3006-3008.
3. ClinicalTrials.gov. "THE PARTNER TRIAL: Placement of Aortic Transcatheter Valve Trial." Available at: <http://clinicaltrials.gov/ct2/show/NCT00530894>. Accessed April 21, 2010.

EMORY HEALTHCARE

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Why Choose Emory?

As one of the few centers in the country – and the most comprehensive in the Southeast – Emory is performing an investigative procedure called transcatheter aortic valve implantation.

If you have a patient with aortic stenosis who may be a candidate for this procedure, please contact the cardiology research coordinator at 404-712-7667 or eblock@emory.edu, or contact Vinod Thourani, MD, FACC, at 404-686-2513. An extensive initial evaluation can be performed at Emory University Hospital or Emory University Hospital Midtown. Our multidisciplinary team will then review the results of the evaluation in order to tailor a treatment approach. Patients who are not eligible for a transcatheter heart valve may still undergo other innovative surgical options at Emory, including minimally invasive surgery or an apical-aortic conduit.

You can learn more about Emory's Structural Heart Program at www.emoryhealthcare.org/structuralheart.

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