

# MERCY HEART & VASCULAR INSTITUTE CARDIAC MONITOR



FOR PHYSICIANS

## TRANSCATHETER VALVE REPLACEMENT: A REVOLUTIONARY PROCEDURE

In a move that may revolutionize valve repair procedures, the Food & Drug Administration in November approved the first aortic valve replacement that can be implanted without using open-heart surgery. The Mercy Heart & Vascular Institute team is slated to be among the first hospitals in the nation to offer this procedure, known as transcatheter aortic valve replacement (TAVR) to patients.

“This is a game-changer in heart valve replacement,” says Dr. Kapil Sharma, co-director of Mercy’s TAVR program. “I believe TAVR will revolutionize how we repair valves.”

### Improving Quality of Life for Patients

TAVR, manufactured by Edwards Lifesciences, is currently approved for non-surgical patients suffering from aortic valve stenosis – a calcification and narrowing of the aorta. Without treatment, half these patients will die within a year of the onset of symptoms. The standard treatment is valve replacement via open heart surgery. However, given their age and risk factors, open heart surgery is too risky for TAVR patients. “These are patients who previously had no options – they were too sick for surgery but most would not survive more than a year or

two with their diseased valve,” explains Dr. Michael Chang, co-director of Mercy’s TAVR program. “TAVR gives them a non-surgical option for improving their quality of life and extending their life as well.”

The TAVR procedure involves threading a replacement valve (from cow tissue) through the femoral artery via catheter. The replacement valve is transported via a stainless steel mesh frame (similar to a stent) and, once released, is expanded with a balloon and immediately functional.

The outcome for patients is roughly 20% better: the mortality rate at one year without therapy is 50%, while those treated with TAVR had a mortality rate of 30%. “When looking at these numbers it is important to remember that we are dealing with very sick patients,” explains Dr. Chang. “TAVR is the best procedure for the appropriate patient. The benefit is improved quality of life.”

### Mercy Unveils Valve Clinic

Mercy is ushering in this new era of cardiac care by introducing the new Mercy Valve Clinic. “The team approach is critical with TAVR,” says Dr. Sharma. “It starts with the assessment and selection of patients – a cardiologist and cardiac surgeon

working together to determine what is best for each individual patient.” This evaluation will include a quality of life index assessment as well as multiple medical screenings. The Valve Clinic will also offer patients a nurse practitioner to guide them through the process.

Both Dr. Chang and Dr. Sharma anticipate that, over time, the indications for TAVR will be broadened to include a wider spectrum of patients. And that, says Dr. Sharma, is exciting. “What we are seeing right now is only the infancy of what this procedure can do. It has the potential to be the new gold standard for valve replacement – and Mercy is leading the way.” ♥

### MERCY HEART & VASCULAR INSTITUTE VALVE CLINIC

TAVR Valve Procedures are performed at Mercy General Hospital, the largest cardiac surgical program in California. If you have a patient who you believe may be a candidate for a TAVR Valve Procedure, you may refer him/her to the Mercy Valve Clinic for an evaluation with our Nurse Practitioner and Physician team. The Mercy Valve Clinic is open Monday – Friday and is located at 3810 J Street, Sacramento.

To learn more call 916.453.4768 or 1.877.999.TAVR (8287). ♥

## IS ANTICOAGULANT NECESSARY AFTER ABLATION?

A 2011 study published in the journal *Circulation Arrhythmia and Electrophysiology* may change treatment guidelines for atrial fibrillation (AF) patients following catheter ablation procedures. Current guidelines call for most at-risk patients to take lifelong oral

Dr. Arash Aryana, cardiac electrophysiologist with Mercy Heart & Vascular Institute, co-authored the study, which sought to evaluate the long term outcomes of stopping oral anticoagulants following successful percutaneous catheter ablation of AF. More than 300 patients were followed during the study. Oral anticoagulation with warfarin was administered to all patients following catheter ablation, but was discontinued after 3 months and replaced with aspirin. In some patients at high risk, the anticoagulant was continued for 6 to 12 months.

The results showed that after 4 years, no thromboembolic complications or AF-related mortality had occurred in patients who had been off warfarin, despite an elevated CHADS<sub>2</sub> risk score

in 68.8% of patients – a cohort in whom the current guidelines strongly recommend life-long anticoagulation. On the other hand, major adverse events such as intracranial hemorrhage occurred in several patients who had continued anticoagulation.

“The results of this study have been well-received, and I believe the findings will have major clinical implications,” explains Dr. Aryana. “It is likely that following catheter ablation of AF, procedural success may ultimately serve as a more powerful predictor of the need for long term anticoagulation than the patient’s baseline CHADS<sub>2</sub> risk score. Given the serious risks and side effects associated with the use of oral anticoagulants, this obviously seems very exciting.” ♥

### WHAT IS CHADS<sub>2</sub> RISK SCORE?

CHADS<sub>2</sub> scoring estimates stroke risk by assigning AF patients one point for each of the following risk factors: congestive heart failure (C), high blood pressure (H), age of 75 or older (A), and diabetes (D), plus two additional points for previous stroke (S<sub>2</sub>) or transient ischemic attack. A score of 2 or more typically indicates a need for oral anticoagulant therapy.

anticoagulants (warfarin, brand name Coumadin) as a means to prevent future strokes and other thromboembolic complications. That risk is generally assessed based on the CHADS<sub>2</sub> scoring system (see inset), which recommends continuing long term anticoagulation in the setting of an elevated risk score (typically 2 or more). However, this notion was challenged by this latest study which found that discontinuing anticoagulants 3 to 6 months following catheter ablation may not only be safe for many patients, but perhaps even preferred.

### MHVI ENROLLING FOR MAGNA EASE STUDY

By Cherri Corcoran, MHVI Cardiovascular Research Coordinator

Valvular heart disease is a life-threatening disease that afflicts millions of people worldwide and leads to approximately 250,000 valve repairs and/or replacements each year.

Mercy Heart and Vascular Institute’s research department will soon begin enrollment of patients requiring aortic valve replacement in the Magna Ease Study. The primary objective of this post-approval study is to obtain long-

term human clinical data, in order to demonstrate that the Carpentier-Edwards PERIMOUNT Magna Ease is a safe and effective replacement aortic bioprosthesis.

The Carpentier-Edwards Magna Ease 3300THX is a trileaflet valve comprised of bovine pericardium that has been preserved in a buffered glutaraldehyde solution and mounted on a flexible cobalt–chromium alloy frame. ♥

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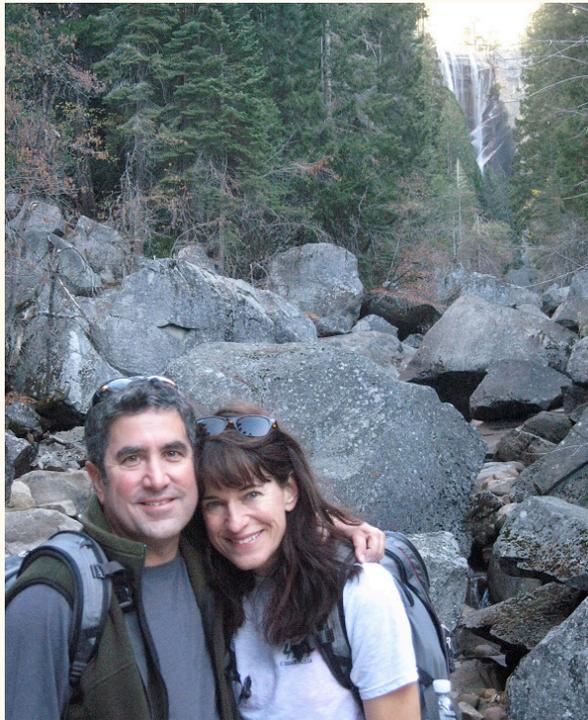
Doris Frazier, RN, MS

## MHVI MANAGER SAVES SOCCER TEAMMATE

In his job as Mercy's Cardiac Rehab manager, Ken Rogaski assists cardiac patients as they return to exercise following a cardiac event or procedure. But nothing he has seen on the job compared to the shock he felt when a teammate collapsed during a soccer game last October. "He said he didn't feel well," remembers Ken. "He dropped to his knees and fell face first."

Paul Coyne, 49, was suffering from cardiac arrest. He was breathing, but his pulse was weak and irregular. Ken told someone to call 911 and began chest compressions. "When I assessed him and realized he needed CPR, my training kicked in. I was able to remain calm because I knew what to do," remembers Ken.

Paul was taken by ambulance to nearby Mercy Folsom, where he was stabilized before being transferred to Mercy General Hospital. There, Dr. Arash Aryana, Mercy Cardiologist, determined that Paul's heart needed an implantable cardioverter-defibrillator (ICD). "Mr. Coyne had developed ventricular fibrillation, resulting in rapid and uncoordinated contractions of the heart muscle of his ventricles," explains Dr. Aryana. "This is a medical emergency that quickly becomes fatal if not properly rescued with early CPR and prompt defibrillation."



In the months since the ICD was implanted, Paul says he has returned to his active lifestyle with few problems. He celebrated his 20<sup>th</sup> wedding anniversary with a 6-hour hike at Yosemite with his wife. And while he hasn't returned to the soccer field yet, he sees no reason why he won't be back soon. "I just can't thank everyone at Mercy enough – and Ken especially. He saved my life. Without him, this would have had a very different ending." ♥

Paul Coyne, and his wife Marjorie, on their 20th wedding anniversary trip to Yosemite National Park. Paul says, "Thanks to Ken, we could celebrate!"

## CARDIOLOGIST JOINS MMG

Mercy Medical Group welcomes Dr. Samir Artoul to its Midtown and Big Horn office locations. Dr. Artoul is a cardiologist who studied at The Hebrew University in Jerusalem and did his cardiology fellowship at the Albert Einstein School of Medicine in New York City. Dr. Artoul has special clinical interests in non-invasive and nuclear cardiology. ♥



## MERCY WOMEN'S HEART HEALTH ADVISORY COUNCIL

Mercy's Women's Health Center has reached out to Sacramento area women and developed a Women's Heart Health Advisory Council. Along with local women leaders, Dr. Armine Sarchisian, Mercy Medical Group OB/Gyn, has joined the Council to provide the physician perspective in counseling and advising women on heart and health risks.

Through the guidance of the Council, Mercy is planning women-focused events to educate, motivate and inspire women to improve their health and to educate physicians on risks specific to women.

The first community event is planned for Feb. 25 in Folsom. The "Day of Dance" will promote activity and fun as part of a healthy lifestyle, along with screenings. Watch for more information during February's "Heart Month" communication. ♥



## UPDATE: SPANOS HEART & VASCULAR CENTER

Construction of the Alex G. Spanos Heart & Vascular Center continues on the Mercy General Hospital campus. The new building is now sheathed in weather-proofing material in anticipation of the coming rainy season. Inside the structure, installation of electrical and mechanical systems continues. The Heart & Vascular Center is expected to open in late 2012. ♥

## 2011 MHVI SYMPOSIUM A SUCCESS

More than 200 healthcare professionals attended MHVI's 21st Annual Cardiology & Electrophysiology Symposium, "Concepts and Controversies," in October. Dr. Kapil Sharma and Dr. Allen Morris lectured on "A New Era in Cardiovascular Care" and Dr. Scott Baron provided an update on hypertension. *Pictured from left to right: Dr. Gearoid O'Neill; Doris Frazier, MGH VP Cardiovascular Services; Dr. Laurence Epstein; Dr. Scott Baron; Dr. Sumeet Chugh; and Dr. Michael Chang.*



Save the Date: Next year's Symposium will be on Saturday, Oct. 6, 2012 at the Sacramento Hyatt Regency. ♥

## MERCY HEART & VASCULAR GETS ONLINE UPDATE

If you haven't visited [www.mercyheartsacramento.org](http://www.mercyheartsacramento.org) lately, take a minute to check it out. All of the content has been updated and the site navigation has been improved for more efficient function. Your patients can find information regarding classes and screenings at Mercy, as well as descriptions of a procedures or diagnosis and videos highlighting our physicians and technology, so encourage them to make use of this helpful tool. ♥

## REFERRAL RESOURCES

The following Mercy programs are available for physicians to refer their patients to and to help in managing heart disease.

### Heart Smart and CHAMP®:

916.564.2880

### Cardiac Conditioning:

Mercy General Hospital 916.453.4521

Mercy San Juan 916.537.5296

### Pulmonary Rehabilitation:

Mercy General Hospital 916.453.4268

Smoking Cessation 916.453.4927

Mercy San Juan 916.537.5299

### ICD Support Group

916.733.6966

### Vascular HealthScreen

916.733.6245

### Heart HealthScreen

916.733.6245

### Women's Heart

Health Center

916.733.6245

MERCY GENERAL HOSPITAL  
MERCY HOSPITAL OF FOLSOM  
MERCY SAN JUAN MEDICAL CENTER  
METHODIST HOSPITAL OF SACRAMENTO  
SIERRA NEVADA MEMORIAL HOSPITAL  
WOODLAND HEALTHCARE

[mercyeartsacramento.org](http://mercyeartsacramento.org)

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