



CARDIO BEAT

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Game-Changing Option For Advanced Heart Failure Patients with CAD

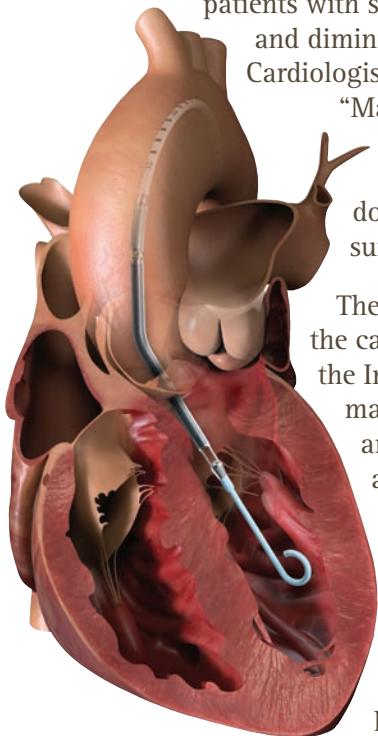
The U.S. Federal Drug Administration recently expanded approval of the Impella® 2.5 heart pump as the only hemodynamic support device proven to be safe and effective for heart failure patients with coronary artery disease (CAD).

“During this minimally invasive Protected Percutaneous Coronary Intervention (PCI) procedure, a tiny heart pump called Impella® 2.5 is inserted by the cardiologist in patients with severe symptomatic CAD and diminished heart function,” explains Cardiologist Akshay Khandelwal, M.D.

“Many of our patients treated at Henry Ford Hospital are those who have been turned down for traditional open-heart surgery or cath lab procedures.”

The procedure is completed in the catheterization laboratory using the Impella® 2.5 heart pump to maintain stable blood pressure and circulation during balloon angioplasty and stenting, enabling the cardiologist to reopen the narrowed or blocked coronary arteries, leading to less adverse events, an improved quality of life and less time in the hospital.

Dr. Khandelwal explains, “Protected PCI has been shown in clinical trials to decrease the incidence of readmissions to the hospital and improve quality of life by reducing symptoms of heart failure and decreasing complications typically associated with PCI procedures.” Protected PCI is covered by Medicare, Medicaid and all major payors.



The Protected PCI Team includes:

- Akshay Khandelwal, M.D.
- Khaldoon Alaswad, M.D.
- Michele Voeltz, M.D.
- Gerald Koenig, M.D., Ph.D.
- Mohammad AL-Quarez, M.D.
- David Lanfear, M.D.
- Gaetano Paone, M.D.
- Jamil Borgi, M.D.
- Hassan Nemeh, M.D.



Akshay Khandelwal, M.D.

Use of the Impella® 2.5 is just one of the ways our “heart team strives to discover and use the best percutaneous, surgical combination or medical management strategies for high-risk CAD patients,” says Dr. Khandelwal. “Providing complex coronary revascularization is at the forefront of the team’s research and treatment.”

For more information about the Protected PCI procedure, the Impella® 2.5, or to refer a heart failure patient with CAD to the Henry Ford Heart & Vascular Institute, please call 1-866-434-2337.

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WOMENHEART CHAMPIONS

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CREATING A 21ST CENTURY VIRTUAL VEIN CLINIC

STRUCTURAL HEART

TAVR resolves heart failure symptoms for 95-year-old Arizona resident

An annual trip to Michigan became a life-saving journey in September 2015 for 95-year-old Gurnith Crawford.

“Every year Mom visits us in Michigan, but this year, we thought it was the last visit,” says daughter Janette Parrish of Lincoln Park, Mich.

Crawford was in heart failure. With a history of two open-heart surgeries, her echocardiogram showed a severely stenotic 16-year-old tissue valve. Bilateral pleural effusions had required repeated thoracentesis. For Crawford, the mortality risk for a traditional valve replacement with open surgery was 18.1 percent.

Crawford was first admitted to another area hospital. There, the cardiologist recognized she was a candidate for transcatheter aortic valve replacement (TAVR) and personally called William W. O’Neill, M.D., medical director of the Center for Structural Heart Disease program at Henry Ford Hospital in Detroit and pioneer of TAVR.

Within a few days of Crawford’s admission to Henry Ford Hospital, Dr. O’Neill and his team performed a valve-in-valve TAVR procedure. TAVR is approved for people with symptomatic aortic stenosis who are considered high risk for standard valve replacement surgery.

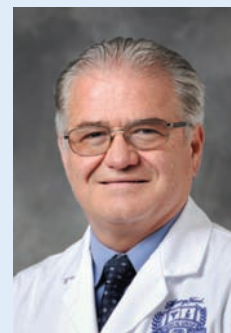
Dr. O’Neill and his team fit a new replacement valve into the aortic valve’s place through a catheter in the femoral artery. Once the new valve is expanded, it pushes back the old valve, creating a foundation that holds the new one in place.

“She never had any pain afterward, and was discharged in a few days,” says Mrs. Parrish. “In less than one month, she attended her grandson’s wedding in Arizona.”

By October, Mrs. Crawford had returned to her home in Arizona where she continues to live independently, drive, and play bingo and poker five nights a week. She completes 1,000-piece puzzles and walks the quarter-mile to her neighborhood clubhouse.

“Mom would not be here if it were not for Dr. O’Neill and his team,” says Mrs. Parrish. “It’s a real miracle.”

For more information about TAVR and the Center for Structural Heart Disease, call 1-855-518-5100.



William W. O’Neill, M.D.



Gurnith Crawford enjoys her grandson's wedding.

WomenHeart Champions

In the fight against heart disease, *WomenHeart Champions* are a set of “red heels on the ground,” community educators and role models in their neighborhoods. Through national heart health forums, they educate women surviving with chronic heart disease.



In partnership with the *WomenHeart* National Hospital Alliance, Jacqueline McNeal and Phylis Jackson were selected from the Henry Ford Health System community to be the Henry Ford *WomenHeart Champions*. They attended the *WomenHeart*

Science & Leadership Symposium at Mayo Clinic, which is the foundation for building peer-lead local support networks around the country. The Henry Ford *WomenHeart* Support Network will be integrated into the Women’s Heart Center, a new women’s cardiovascular center set to open soon.

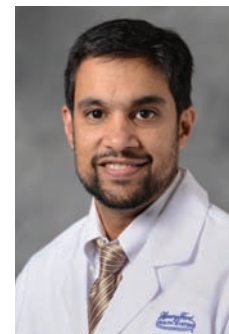
UNTOUCHED Trial Investigates Application Efficacy of S-ICD Device

Prevention of sudden cardiac death has made significant advances since the first internal defibrillator was transplanted intravenously. For patients with life-threatening ventricular tachycardia and without pacing indication, the subcutaneous implantable device, or S-ICD device, provides a new option and is an alternative for patients who prefer to have a defibrillator without a transvenous lead.

With the S-ICD, the lead is placed along the rib margin to the breastbone, eliminating the lead wires being placed inside the blood vessels. The device is then placed outside the chest wall, below the armpit.

Ali Shakir, M.D., vice chief, electrophysiology at Henry Ford Macomb Hospital, was one of the first in Michigan to implant the FDA-approved S-ICD device subcutaneously. He explains, "The device provides defibrillation for the treatment of an abnormally fast heart rate that originates from the lower chambers of the heart called ventricular tachycardia."

"This advancement is more cosmetically appealing and long-term use of this device reduces the risk of infection and blood clots," says Dr. Shakir. "Also, if the leads require replacement, it is a much easier procedure for the patient."



Ali Shakir, M.D.

In an effort to further study the use of the S-ICD device, a national study called UNTOUCHED is underway. As one of the study's investigators, Dr. Shakir explains the goal is to determine the most effective application of defibrillation therapy over an 18-month period. Participants are needed for this study. Physicians or patients may schedule a consultation by calling (586) 776-8877.

To refer a patient for treatment using the S-ICD device, call the Henry Ford Heart & Vascular Institute at 1-877-434-7470.

NEW STAFF UPDATE

MOHAMMAD AL-QARQAZ, M.D.

Senior Staff Interventional Cardiologist

MEDICAL SCHOOL EDUCATION:

Jordan University of Science and Technology

POST-GRADUATE TRAINING:

Henry Ford Hospital (MI) – Interventional Cardiology

Henry Ford Hospital (MI) – Cardiovascular

Henry Ford Hospital (MI) – Internal Medicine

King Abdullah University Hospital (Jordan)

BOARD CERTIFICATIONS:

American Board of Internal Medicine

American Board of Internal Medicine: Cardiovascular Disease

Certification Board of Nuclear Cardiology: Nuclear Cardiology

National Board of Echocardiography: Adult Echocardiography

AREAS OF CLINICAL EXPERTISE INCLUDE:

Dr. AL-Qarqaz's areas of clinical interest include minimally invasive heart procedures for angioplasty, ventricular support devices and percutaneous peripheral interventions.

Dr. AL-Qarqaz is fluent in Arabic.

PUBLICATIONS:

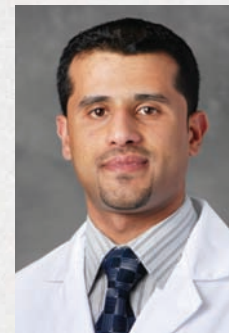
Abaunza M, Kabbani LS, Nypaver T, Greenbaum A, Balraj P, Qureshi S, Alqarqaz M, Shepard AD. Incidence and prognosis of vascular complications after percutaneous placement of left ventricular assist device. *J Vasc Surg*, 2015 Jun 5. PMID:26054591.

Alqarqaz M, Albashaireh D, Guerrero M. Multiple and recurrent coronary stent fractures. *J Invasive Cardiol*. 2014 Jan;26(1):E7-12. PubMed PMID:24402813.

Alqarqaz M, Koneru J, Mahan M, Ananthasubramaniam K. Applicability, limitations and downstream impact of echocardiography utilization based on the appropriateness use criteria for transthoracic and transesophageal echocardiography. *Int J Cardiovasc Imaging*. 2012 Dec;28(8):1951-8. doi:10.1007/s10554-012-0008-6. Epub 2012 Jan 10. PubMed PMID: 22231468.

Alqarqaz M, Zaidan M, Al-Mallah MH. Prevalence and predictors of atherosclerosis in symptomatic patients with zero calcium score. *Acad Radiol*. 2011 Nov;18(11):1437-41. Epub 2011 Sep 13. PubMed PMID: 21917486.

Alqarqaz M, Zaidan M, Al-Mallah MH. Hypertrophic cardiomyopathy and anomalous left coronary artery: a rare combination. *J Cardiovasc Med (Hagerstown)*. 2011 Dec;12(12):915-8. doi: 10.2459/JCM.0b013e328343591d. PubMed PMID: 21228715.



Mohammad AL-Qarqaz, M.D.

To connect with a Henry Ford physician, call:

Heart & Vascular Institute
1-877-434-7470

Center for Structural
Heart Disease
1-855-518-5100



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RESEARCH

Creating a 21st Century Virtual Vein Clinic

Imagine seeing your patients virtually for post-surgical follow ups. It's a win-win for both the surgeon and the patient with the latest in this emerging technology. The surgeon can increase appointment slots during a clinic, which improves patient access to a specialist. Patients have the convenience of driving to the Henry Ford location closest to their home whether its our site in Sterling Heights, Grosse Pointe, West Bloomfield or Detroit.

"For the patient, a virtual appointment also reduces the wait time at the doctor's office and in length of time to schedule the next appointment. This efficiency also improves patient satisfaction," says Judith Lin, M.D., director of the Henry Ford Vein Center and medical director of the Vascular Lab. "As the fastest-growing segment in healthcare, telemedicine will improve patient access, minimize provider shortages, satisfy patient demand, and ultimately reduce healthcare costs."

Currently, the virtual post-surgical appointment is scheduled by the patient's nurse, who then coordinates post-surgical imaging studies with the virtual appointment. When the studies are complete, the patient steps into a

private room and is connected securely through HIPAA compliant software via computer to the vascular surgeon. The patient can see the studies as the doctor talks with the patient and explains next steps in the patient's care.

It took about three months to launch the virtual clinic, working with Information Technology staff, EPIC, electronic medical record system, the Henry Ford Contact Center and Referring Physician Office staff. "We did it and it works," says Dr. Lin. "Every medical or surgical specialty will need to figure out the service that best fits a virtual environment. We'll soon be calling this the 21st century house call."

Pre-surgically, patients are screened for their interest in virtual visits. For patients who are 65 or using Medicare to qualify, they must be located in a rural area facing health professional shortage. "We hope to make telemedicine possible for these patients in underserved areas in the not too distant future," says Dr. Lin.



Judith Lin, M.D.