



FALL 2025

THE VALLEY HEART AND VASCULAR INSTITUTE

Everything Medicine Can Do. A Few Things Medicine Can't.

Heart Recovery Team at The Knispel Center for Comprehensive Cardiomyopathy Care.



THE VALLEY HEART AND VASCULAR INSTITUTE

is known for its depth of experience and high-quality care. Valley's multidisciplinary team approach to care represents a forward thinking and integrated strategy for the treatment of cardiovascular pathologies that is centered on each individual patient's needs.

We are pleased to present a roundup of the latest programs, technology, and research offered by Valley's cardiovascular team. For more information about The Valley Heart and Vascular Institute, please visit ValleyHealth.com/Heart.



The Valley Hospital has been rated as a **high performing hospital** for abdominal aortic aneurysm repair, heart arrhythmia, heart attack, and pacemaker implantation **by U.S. News & World Report 2025–26**.

INTRODUCING SAMIT SHAH, MD



VALLEY HEALTH SYSTEM IS PLEASED TO WELCOME SAMIT SHAH, MD, as the new **Medical Director of Mechanical Circulatory Support** at The Valley Hospital.

Dr. Shah is a board-certified heart failure specialist who brings experience and robust understanding of heart failure management to Valley. He specializes in advanced heart failure and transplant cardiology; pulmonary hypertension; infiltrative disorders, such as cardiac amyloidosis and sarcoidosis; and mechanical support, such as left ventricular assist device (LVAD). In his previous role, Dr. Shah served as the Director of Heart Failure at Long Island Jewish Medical Center as part of Northwell Health.

Dr. Shah received his medical degree from the University of Rochester School of Medicine and Dentistry in New York. He completed a residency in internal medicine at New York University Langone Health in New York, where he also served as chief resident; a cardiovascular fellowship at the Icahn School of Medicine at Mount Sinai in New York; and a fellowship in advanced heart failure and transplant cardiology at Yale New Haven Hospital in Connecticut.

Dr. Shah looks forward to partnering with you in delivering high-quality care and helping your patients return to a functional state of health.

To learn more about Dr. Shah, please scan the QR code to watch his recent video interview.

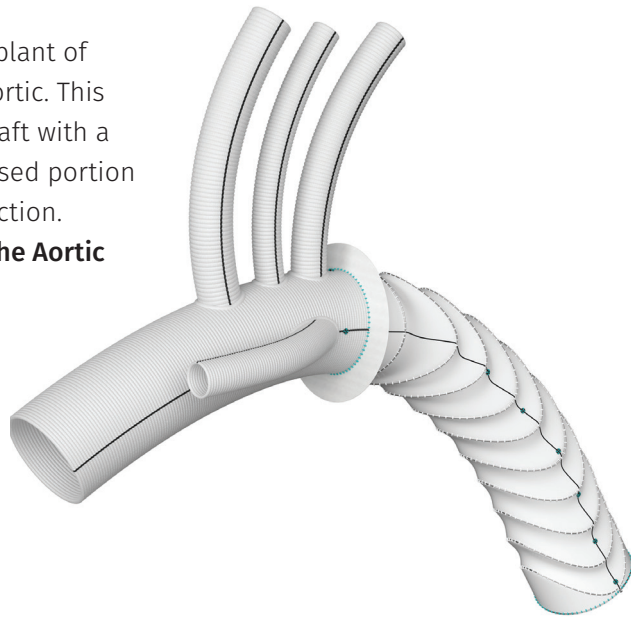


ADVANCED

VALLEY PERFORMS FIRST HYBRID GRAFT AND STENT IMPLANT

The Valley Hospital has successfully performed its first implant of the Thoraflex™ Hybrid graft, manufactured by Terumo Aortic. This device is a hybrid system combining a polyester aortic graft with a self-expanding thoracic stent and is used to replace the diseased portion of the aorta in patients who have an aortic aneurysm or dissection. The implant was performed by **Habib Jabagi, MD, Director of the Aortic Aneurysm Program at The Valley Hospital.**

The Thoraflex™ graft enables a safer, single-stage surgical approach for patients with extensive aortic disease, offering a compelling alternative to the traditional two-stage procedure, which typically involves initial aortic repair followed by delayed stenting. This advanced hybrid graft is associated with fewer post-operative complications, including reduced bleeding and lower transfusion requirements, and minimizes overall procedural risks. In select cases, it even facilitates complete resolution of aortic dissections in a single operation.



Thoraflex™ Hybrid graft.

NEW CARDIAC PET-CT IMAGING NOW AVAILABLE AT VALLEY

Valley Health System – Ridgewood Campus now offers advanced cardiac PET-CT, expanding our diagnostic capabilities for myocardial blood flow assessment. This test evaluates blood flow and detects artery blockages and microcirculation issues that may be missed by other imaging techniques.



Using the latest PET scanner manufactured by Siemens Healthineers, PET-CT delivers higher-resolution images with a lower radiation dose compared to conventional nuclear methods. It is faster and more comfortable, making it suitable for a wide range of patients. PET-CT complements traditional stress testing and provides valuable insights into microvascular dysfunction and epicardial coronary disease that can elude standard tests.

Valley remains committed to advanced imaging technologies, guided by our dedicated team of cardiac imagers, to enhance diagnostic accuracy and cardiovascular care.

CARDIOVASCULAR IMAGING LOCATIONS

The Valley Hospital

4 Valley Health Plaza, Paramus

Cardiac CT, cardiac MRI with implanted devices, coronary CT with Cleerly Coronary Analysis, FFRCT

Ridgewood

1200 East Ridgewood Avenue, West Wing, Suite 307, Ridgewood

Echocardiogram, nuclear stress test, stress echocardiogram, stress test, vascular ultrasound

Wayne Medical

1578 Route 23 North, Suite 203, Wayne

Echocardiogram, nuclear stress test, stress echocardiogram, stress test, vascular ultrasound

Westwood

333 Old Hook Road, Suite 200, Westwood

Echocardiogram, nuclear stress test, stress echocardiogram, stress test, vascular ultrasound

Clifton

1030 Clifton Avenue, Clifton

Echocardiogram, nuclear stress test, stress echocardiogram, stress test, vascular ultrasound

Paramus

95 Route 17 South, Paramus

Echocardiogram, stress test, vascular ultrasound

Manhattan

200 West 57th Street, Suite 610, New York

Echocardiogram, stress echocardiogram, stress test, vascular ultrasound

Valley Health System – Ridgewood Campus

223 North Van Dien Avenue, Ridgewood

Cardiac MRI, echocardiogram, MRA, nuclear stress test, PET-CT, PYP for cardiac amyloidosis, stress test, vascular ultrasound

Robert and Audrey Luckow Pavilion

One Valley Health Plaza, Paramus

MRI/MRA

THE KNISPEL CENTER FOR COMPREHENSIVE CARDIOMYOPATHY CARE

WHERE HEART FAILURE AND CARDIOMYOPATHY CARE MEET

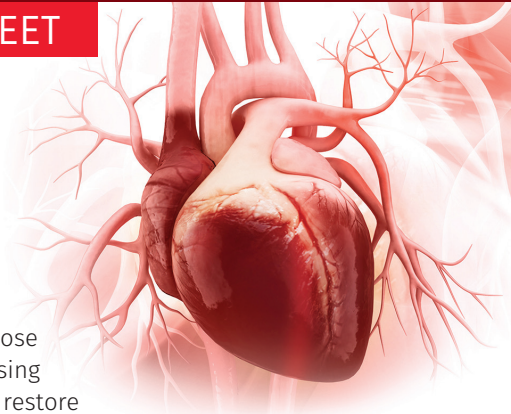
Hear failure and cardiomyopathy are closely connected, but they don't always occur together. At The Valley Heart and Vascular Institute, we understand the differences and the overlap between these two heart conditions. That's why we've launched The Knispel Center for Comprehensive Cardiomyopathy Care.

At The Knispel Center for Comprehensive Cardiomyopathy Care we recognize that not all heart failure patients have cardiomyopathy, and not all cardiomyopathy patients will develop heart failure. Combining the skills to treat both conditions, we have brought together subspecialists with expertise in pulmonary hypertension, cardiac critical care, advanced heart failure, cardiac surgery, and hypertrophic cardiomyopathy. This range of experience allows us to diagnose and manage the full spectrum of these cardiac conditions using a collaborative, multidisciplinary care approach designed to restore functional quality of life.

Patients referred to the Knispel Center have access to a wide array of advanced treatment options. These include advances in medical management; innovative device-based therapies such as cardiac contractility modulation and carotid baroreceptor stimulation; and — if needed — left ventricular assist devices.

Whatever a patient requires, our heart recovery team at the Knispel Center works together to develop a customized treatment plan that is tailored to the individual's recovery journey — because every heart tells a different story, and every patient has something important to get back to.

If you have a patient with heart failure or cardiomyopathy, let our team be your partners in their care. To refer a patient, please call 201-447-8019.



THE IMPORTANCE OF PREVENTIVE CARDIAC SCREENING

Cardiovascular disease remains the leading cause of death in the United States, according to the American Heart Association.

As clinicians, we play a pivotal role in reversing this trend by promoting preventive strategies and early detection. Encourage your patients to take charge of their heart health through screening.

Preventive screenings offered through Valley, include:

CARDIAC SCREENING

Valley Health System offers a comprehensive cardiac screening program designed to detect cardiovascular risk early and guide patients toward healthier outcomes. This free, noninvasive screening is available to individuals between the ages of 20 – 85. Assessment includes a detailed health history, comprehensive review of cardiovascular risk factors including enhanced risk factors, physical exam, and lab work review to generate an atherosclerosis (ASCVD+) risk score. Patients receive a personalized action plan, which may include evidence-based lifestyle counseling and referrals to cardiologists or for advanced cardiac imaging.

To learn more about cardiac screening, please visit [ValleyHealth.com/HeartScreening](https://valleyhealth.com/HeartScreening).

CORONARY ARTERY CALCIUM SCREENING

A valuable tool for identifying atherosclerosis in asymptomatic patients. This noninvasive CT scan quantifies calcified plaque in the coronary arteries, helping to refine cardiovascular risk stratification. Coronary artery calcium screening empowers clinicians to personalize care and initiate preventive strategies before symptoms arise.

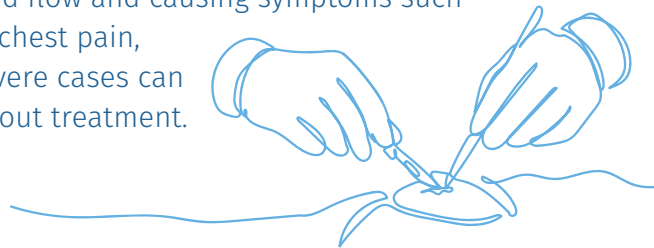
To learn more about coronary artery calcium CT screening, please visit [ValleyHealth.com/Calcium](https://valleyhealth.com/Calcium).





AORTIC STENOSIS TREATMENTS

Aortic stenosis is a narrowing of the aortic valve, which controls blood flow from the heart to the body. Over time, the valve can stiffen or calcify, reducing blood flow and causing symptoms such as shortness of breath, chest pain, dizziness, or fatigue. Severe cases can be life-threatening without treatment.



The main treatment is valve replacement, either by:

Surgical Aortic Valve Replacement (SAVR)

An invasive procedure to remove the diseased valve and replace it with a mechanical or tissue valve. Often recommended for younger, healthier patients or those needing additional heart surgery.

Transcatheter Aortic Valve Replacement (TAVR)

A minimally invasive procedure in which a new valve is inserted via a catheter, usually through the leg, and expanded inside the old valve. Once reserved for high-risk patients, TAVR is now available to low-risk patients age 65 and older.

Scan the QR code to learn how our teams offer SAVR and TAVR using a multidisciplinary and collaborative care approach.



HIGHLIGHTS

THE LATEST VIDEO HIGHLIGHTS FROM THE VALLEY HEART AND VASCULAR INSTITUTE

In case you missed it — take a moment to catch up on the latest highlights from The Valley Heart and Vascular Institute. Check out this selection of videos featuring the newest breakthroughs, expert insights, and key moments that are advancing cardiovascular care.



LEFT ATRIAL APPENDAGE CLOSURE TREATMENT OPTIONS

Learn how Valley Health System tailors left atrial appendage closure options to optimize stroke prevention in patients with non-valvular atrial fibrillation.



WHAT IS CT-FFR?

Understand how Valley Health System uses fractional flow reserve derived from computed tomography (CT-FFR) to noninvasively assess coronary artery disease and guide treatment decisions.



TRANSCATHETER EDGE-TO-EDGE REPAIR

Discover how Valley Health System uses transcatheter edge-to-edge repair (TEER) to treat mitral and tricuspid regurgitation in patients who are not candidates for heart surgery.

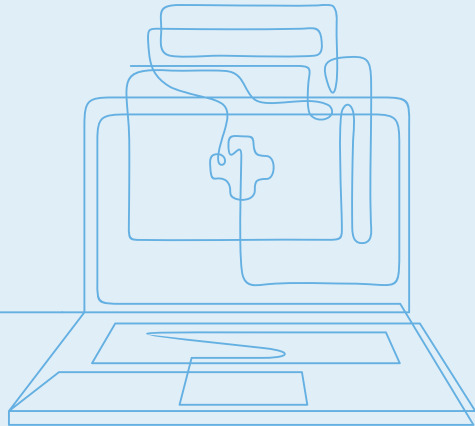


AORTIC STENOSIS TREATMENTS

Explore how Valley Health System offers a range of aortic stenosis treatments, from medication management to minimally invasive and surgical valve replacement options.

RESEARCHING MEDICAL BREAKTHROUGHS

At the Okonite Research Center, Valley's state-of-the-art home for research and clinical trials, the cardiovascular team is spearheading a multitude of cardiac clinical trials, pioneering advancements in cardiovascular research and treatment methodologies.



TRIAL

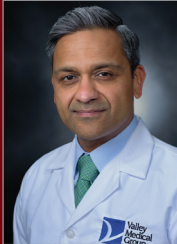
A randomized controlled study of the Prevail Drug-Coated Balloon in subjects with in-stent restenosis and a single arm prospectively enrolled study of the Prevail Drug-Coated Balloon for de novo lesions in small vessel disease (Prevail Global).

OBJECTIVE

The Prevail Global study is a prospective, premarket, interventional, multi-center, global, dual cohort clinical study enrolling subjects undergoing percutaneous coronary intervention for in-stent restenosis (ISR Cohort) in a randomized controlled study of the Prevail Drug-Coated Balloon, and subjects undergoing percutaneous coronary intervention of the Prevail Drug-Coated Balloon for de novo lesions in small vessel disease (DNSV Cohort) in a single arm prospectively enrolled study.

PRINCIPAL INVESTIGATOR

Rajiv Tayal, MD, Director of the Cardiac Catheterization Laboratory and Structural Heart Program, The Valley Hospital.



RECENT PUBLICATIONS

Abeln, B.G.S., van der Graaf, M., **Musat, D.L.**, Gunawardene, M.A., Nair, D.G., Knight, B.P., Wilshire, B., Liebrechts, M., van Dijk, V.F., Wijffels, M.C.E.F., Balt, J.C., **Mittal, S.**, Willems, S., Verma, N., Peigh, G., Malaty, M.M., & Boersma, L.V.A. (2025). **Direct comparison of two commercially available pulsed field ablation systems for atrial fibrillation; Procedure characteristics and acute outcomes.** *Journal of Cardiovascular Electrophysiology*. <https://doi.org/10.1111/jce.16761>

Anjali, A. [Anjali], Gupta, G., Agrawal, A. [Agrawal], & **Gupta, H.** (2025). **Evaluating diversity and stereotypes amongst AI generated representations of healthcare providers.** *Frontiers in Digital Health*, 7. <https://doi.org/10.3389/fdgth.2025.1537907>



To view additional publications, please visit ValleyHealth.com/CardiologyPublications or scan the QR code.



JACC: CASE REPORTS, 30(18)

Early TAVR explantation due to a large mobile leaflet mass and severe prosthetic valve stenosis.

Jabagi, H., Alemany, V.S., Jones, E., **Gupta, H.**, **Kim, F.**, **Tayal, R.**, **Rahim, H.**, **Burns, P.**, & **Grau, J.B.** (2025).

<https://doi.org/10.1016/j.jaccas.2025.103885>



The Valley Heart and Vascular Institute
4 Valley Health Plaza, Paramus, NJ 07652
ValleyHealth.com/Heart

Heart care is a
team effort.



And it begins
with you
at the center.

