TRI-CITY CARDIOLOGY NEWSLETTER

Leaders in Cardiovascular Excellence... Where Patients Come First

2ND QUARTER, 2024



JASKAMAL KAHLON, MD, FACC



Dr. Jaskamal Kahlon is Board Certified in Cardiovascular Disease, Echocardiography, Interventional Cardiology, Internal Medicine, and Nuclear Cardiology. He completed his Fellowship in Cardiovascular Medicine and Internal Medicine Residency at the St. John Hospital and Medical Center, Fellowship in Interventional Cardiology at Emory University and his Residency in Cardiology.

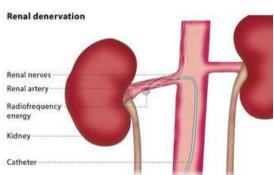
Dr. Kahlon, named among Phoenix magazine's "Top Docs" in Cardiology, boasts a remarkable track record. Recognized by Press Ganey Associates in the top 15th percentile nationally for patient recommendations, his achievements include consistently ranking first division in medical school exams, earning Dean's List honors at Christian Medical College and Hospital, and being named Intern of the Year at St. John Hospital & Medical Center. His clinical expertise is further highlighted by receiving the Case of the Week and Annual Radiology Award.

Renal Denervation: A Promising Intervention in Cardiology

Introduction:

Renal denervation (RDN) has emerged as a promising intervention in the field of cardiology, particularly in the management of resistant hypertension and other cardiovascular conditions. This minimally invasive procedure targets the renal sympathetic nerves, which play a crucial role in regulating blood pressure. In recent years, numerous studies have explored the efficacy and safety of RDN, leading to growing interest and adoption among clinicians. This article provides an overview of renal denervation, its mechanism of action, clinical applications, and future directions in cardiology.





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Mechanism of Action:

The sympathetic nervous system plays a key role in regulating blood pressure by modulating renal function and systemic vascular tone. Overactivity of the sympathetic nerves innervating the kidneys has been implicated in the pathogenesis of hypertension and other cardiovascular diseases. Renal denervation disrupts this neural pathway by selectively ablating or modulating the renal sympathetic nerves, thereby reducing sympathetic tone and lowering blood pressure.

Clinical Applications:

1 - Resistant Hypertension:

Resistant hypertension, defined as elevated blood pressure despite optimal medical therapy, poses a significant challenge in clinical practice. RDN offers a potential solution for patients who fail to achieve adequate blood pressure control with conventional medications. Clinical trials, including the landmark SYMPLICITY HTN-3 trial, have demonstrated the efficacy of RDN in lowering blood pressure and reducing the need for antihypertensive medications.

2 - Heart Failure:

Sympathetic overactivity is a hallmark feature of heart failure and is associated with disease progression and poor prognosis. By modulating sympathetic tone, RDN may offer benefits in the management of heart failure, including improvements in cardiac function, exercise capacity, and quality of life. Preliminary studies have shown promising results, although further research is needed to establish the role of RDN in heart failure management.

3 - Arrhythmias:

Sympathetic activation has been implicated in the pathogenesis of certain arrhythmias, such as atrial fibrillation and ventricular tachycardia. RDN may exert antiarrhythmic effects by attenuating sympathetic tone and modifying the cardiac autonomic balance. Although data are limited, early studies suggest that RDN may reduce the burden of arrhythmias and improve rhythm control in select patient populations.

Future Directions:

Despite the promising results obtained thus far, several key questions remain unanswered regarding the optimal patient selection, procedural techniques, long-term efficacy, and safety of RDN. Ongoing research efforts aim to address these knowledge gaps and refine the use of RDN in clinical practice. Future directions in renal denervation include:

1 - Patient Selection:

Identifying the patient subgroups most likely to benefit from RDN based on clinical and pathophysiological factors.

2 - Procedural Optimization:

Refining procedural techniques, including catheter design, energy delivery, and imaging guidance, to enhance the efficacy and safety of RDN.

3 - Long-Term Follow-Up:

Assessing the durability of blood pressure reduction and clinical outcomes following RDN over extended follow-up periods.

4 - Combination Therapies:

Exploring the potential synergies between RDN and other cardiovascular interventions, such as pharmacotherapy, devicebased therapies, and lifestyle modifications.

5 - Expanded Indications:

Investigating the utility of RDN in additional cardiovascular conditions beyond hypertension, including renal dysfunction, diabetes mellitus, and ischemic heart disease.

Conclusion:

Renal denervation represents a promising therapeutic approach in cardiology, offering a novel strategy for the management of resistant hypertension and other cardiovascular diseases characterized by sympathetic overactivity. While further research is needed to elucidate its long-term efficacy and safety profile, RDN holds considerable potential to transform the treatment landscape and improve outcomes for patients with challenging cardiovascular conditions. Continued collaboration between researchers, clinicians, and industry stakeholders is essential to realize the full clinical benefits of renal denervation and optimize its integration into routine clinical practice.



Four Decades of Excellence

Tri-City Cardiology's Legacy in Heart and Vascular Wellness Since 1979

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CENTERARRHYTHMIA CENTERSURGICAL CENTERS

Tri-City Cardiology has been at the forefront of cardiovascular care for over four decades, dedicated to providing comprehensive and compassionate services to our community. Established in 1979, our commitment to excellence has driven us to evolve with advancements in cardiac medicine, ensuring that our patients receive the best possible care.

Comprehensive Cardiovascular Services

- Diagnostic Imaging
- Disease Management
- Electrophysiology/ Arrythmia Center
- Interventional Cardiology
- Medical Cardiology
- Tri-City Surgical Centers
- Vein & Vascular Center

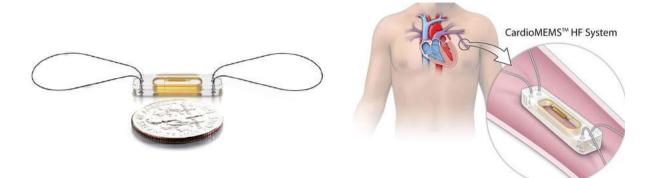
About Tri-City Cardiology

The staff at Tri-City Cardiology comprises 27 board-certified physicians, each committed to delivering exceptional cardiology and vascular care to patients in the Phoenix Metro area. Every member is a distinguished leader in their respective specialties, with many receiving the coveted "Top Doctor" recognition from Phoenix Magazine since the practice's inception in 1979. Hailing from prestigious medical schools and fellowship programs across the nation, the physicians at Tri-City Cardiology have established a renowned national reputation for their excellence and accomplishments.

To learn more about our services, visit our website. www.TriCityCardiology.com



Tri-City Cardiology Chosen as Pioneering Site for CardioMEMS Procedures



We are thrilled to announce that TriCity Cardiology has been chosen as one of the prestigious surgical sites in Arizona to pioneer CardioMEMS procedures at our TriCity Surgical Center. This remarkable opportunity marks a significant milestone in our commitment to advancing cardiovascular care in our community. CardioMEMS is a cutting-edge technology designed to revolutionize the management of heart failure. It involves the implantation of a small device that measures pulmonary artery pressure remotely, allowing for proactive monitoring and early intervention. By integrating CardioMEMS procedures into our practice, TriCity Cardiology is poised to enhance patient outcomes, reduce hospitalizations, and ultimately transform the landscape of cardiac care in Arizona.

This partnership underscores our unwavering dedication to innovation, excellence, and patient-centered care. We look forward to leveraging this groundbreaking technology to optimize cardiac health and improve the lives of countless individuals in our region.



Upcoming TCC Community Events

- June 1st, 2024 Health and Wellness Expo at the Gilbert DoubleTree Hilton
- August 3rd, 2024 Health and Wellness Expo at the Mesa Convention Center
- August 17th, 2024 **Tri-City Cardiovascular Symposium** at the Mesa DoubleTree Hilton

This symposium exclusively caters to providers. For registration, scan the QR code.



Specializing in Women's Cardiovascular Care









Loan Nguyen, MD

Sreedivya Chava, MD

Kelly E. Guld, MD

At Tri-City Cardiology we are proud to have a team of skilled female cardiologists and Advanced Practice Providers committed to providing women's comprehensive cardiovascular care with experience in pregnancy cardiac care, POTS syndrome and women's unique risk and lifestyle factors.



Kristina Bardwell, DNP, AGACNP-BC



Courtney Bradford, RN, BSN, MSN, AG-ACNP



Jodie J. Brasfield, M.S., ACNP-C



Kim Buckley, FNP, ANCC



Stephanie Flores, AG-ACNP



Nicole Jones, AG-ACNP



Christylou Pardo, FNP



an Taggart Alisha Zir

Sophia Loren Taggart, Alisha Zimmer, RN, BSN, MSN, FNP MSN, FNP-C, AACC, CCRN

Patient Testimonials

The Tri-City Cardiology staff is very efficient and friendly. Dr Chava was very caring and personable. She also took care of my clearance for an upcoming surgery. Alonzo, my medical assistant, was exceptional. He was friendly, caring and very professional.

First time visit to the Fiesta Blvd location. Boy, did I get lucky. Appointment was quick, like within 24 hours (it was special circumstances) Saw Dr. Le and she was thorough, attentive and detail oriented. The "scheduling" staff was incredible. I called them the "A" Team. Anabel, Sammy and Luis were so incredibly helpful, explained everything, thorough, personable. In today's world of medicine, I GOT LUCKY!!!

My wife and I are very impressed by NP Christylou Pardo, both for her caring attitude and her knowledge. We frequently see her for follow-up visits from our doctors (Dr's Ly and Villegas). Overall, we are very pleased with the care we receive from this trio of care givers.



Meet our Electrophysiologist Physicians



Kai Sung, MD, FACC, FHRS





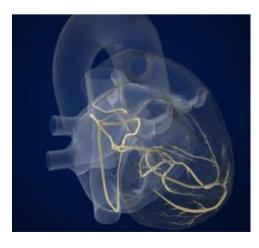
Arun Kolli, MD, FACC, FHRS

Benjamin Jenny, MD, MBA, FACC

As a part of internal medicine and cardiology, cardiac electrophysiology plays a crucial role in effectively diagnosing, evaluating, and caring for individuals with heart conditions. Tri-City Cardiology's Cardiac Electrophysiologists have state of the art technologies in treating and managing heart health for patients with irregular heart rhythms conditions.

<u>The Tri-City Cardiology Arrhythmia Center offers the following services:</u>

- Heart rhythm assessment and diagnostics
- Catheter ablation of arrhythmias
- Pacemaker, ICD and biventricular ICD implantation and management
- Watchman left atrial appendage closure implantation
- Electrical cardioversion
- Tilt table testing





Our Board-Certified Cardiovascular Specialists



David Kassel, MD





Thomas Ritchie, MD Duane Heinrichs, MD





Loan Nguyen, MD



M. Josh Berkowitz, MD



Kai Sung, MD

Arun Kolli, MD















Camille Phuc Le, MD Benjamin Jenny, MD





Suntharo Ly, MD



Roger Bies, MD



Satya Atmakuri, MD Jacob T. Green, MD





Sulay Patel, MD Pridhvi Yelamanchili, MD Shashank Jain, MD Rizaldy Villegas, MD





Sunny Jhamnani, MD

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LOCATIONS

*Select Saturday Hours

*<u>Baywood</u> 6750 E Baywood Ave. Ste 301 & 506 Mesa, AZ 85206

San Tan Valley

36543 N Gantzel Rd. Bldg 15, Ste 101

San Tan Valley, AZ 85140

*<u>Fiesta</u> 1580 N Fiesta Blvd. Ste 100 Gilbert, AZ 85233

Ironwood (New Location)

37200 N Gantzel Rd. Ste 240

Queen Creek, AZ 85140

Mondays Only

<u>Val Vista</u> 3530 S Val Vista Dr. Ste 103

Gilbert, AZ 85297

Gold Canyon (New Location)

6724 S Kings Ranch Rd. Ste 104 Gold Canyon, AZ 85118

*<u>Chandler</u>

333 N Dobson Rd. Ste 11 Chandler, AZ 85224 <u>Sun Lakes</u> 10440 E Riggs Rd. Ste 250 Sun Lakes, AZ 85248

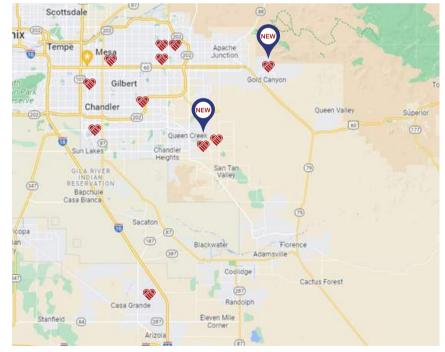
Casa Grande

177 W Cottonwood Ln. Ste 7 Casa Grande, AZ 85122

Superstition/Tri-City Vein & Vascular Center

6402 E Superstition Springs Blvd. Ste 114 Mesa, AZ 85206 <u>Tri-City Surgical Centers</u> 143 S 63rd Street

Mesa, AZ 85206



The physicians and staff at Tri-City Cardiology look forward to providing patients and their families with very good care and service.

> (480) 835-6100 www.TriCityCardiology.com www.TriCityVeinCenter.com

