Renal nerve denervation: Nephrologists perspective

Saravanan Bala
University of Arizona, USA

Abstract

Inadequately controlled hypertension has significant implications on adverse patient outcomes and healthcare cost. Renal Nerve Denervation (RND) is a non-pharmacological endovascular approach in treating hypertension. Two randomized studies have been published on RND that have shown reduction in systolic and diastolic blood pressure in 6 months. The studies have not analyzed mortality, renal or cardiovascular outcomes. The procedure involves ablation of the sympathetic nerves to the kidney which alters renal blood flow and decreases the afferent sympathetic outflow. The long term effects of these alterations in renal hemodynamics are unclear at this point. Despite the flaws in the study design, all the trials on revascularization of ARVD (Atherosclerotic renal vascular disease) have not shown any benefit over optimal medical therapy. However, a onetime procedure with minimal procedural risk might be an acceptable alternative to 2 or 3 additional life-long antihypertensive medications. Since the procedure has a direct effect on renal hemodynamics, it is extremely important for the Nephrologists to be part of the decision making process to choose the ideal candidate for RND. More information on safety and outcomes would be available after the SIMPLICITY-3 trial is published. If RND is approved in the United States, patient recruitment for the procedure should be performed only in Hypertension Specialty clinics which is staffed by a Nephrologist and a Cardiologist of whom one should be a hypertension specialist certified by the American Society of Hypertension.

Biography

Saravanan Bala graduated from Madras Medical College and pursued his Masters in public health at Wichita State University in Kansas. He completed his internal medicine residency and chief residency from Chicago Medical School. He graduated from Internal medicine and was inducted into Alpha Omega Alpha honors medical society for outstanding leadership and teaching. He got his Nephrology fellowship at Tulane University under the mentorship of Dr. Batuman. He currently practices Interventional Nephrology at Angiocare, Tucson and is part of the teaching faculty for the Nephrology Fellowship program at University of Arizona, Tucson.