Renal denervation and other novel strategies for management of resistant hypertension

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Resistant hypertension (RH) has been a nightmare for both specialists and primary care physicians. RH comprises up to 20-25% of patients who are enrolled in hypertension related trials. The risk of cardiovascular events is significantly increased in patients with resistant hypertension. The management of this condition also utilizes excessive health care resources. Several complex neural and humeral physiological processes coordinate the regulation of blood pressure. The autonomic nervous system plays a very important role especially through its sympathetic component. The peri-renal arterial sympathetic fibers and those at the region of carotid sinus are important in blood pressure modulation.

Modulation of blood pressure by modifying the input from the perirenal sympathetic fibers and also that from the carotid sinus has been promising in early studies. This includes Renal Denervation (RDN) and Baroreceptor Activation Therapies (BAT). However, long-term results and safety is not known well. The current status, feasibility, outcome and future directions of both RDN and BAT will be discussed. A detailed discussion of the preclinical and initial clinical trials of both these strategies will be discussed as well.

Biography
Santhosh K. G. Koshy has completed his MBBS at the age of 22 years from University of Kerala in India and then completed Internal Medicine residency and Cardiology fellowship at the same University. He also completed Internal Medicine residency and Cardiology fellowship in United States before his fellowship in Interventional Cardiology at University of Alabama at Birmingham. He was a faculty at Baylor College of Medicine before he moved to University of Tennessee, where he is currently the Chief of Medicine at Regional One Health System of University of Tennessee Health Sciences Center in Memphis. He is also the director of Cardiovascular Services and Interventional Cardiology at Regional Med Hospitals and also the director of interventional cardiology fellowship at University of Tennessee.

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