

PANEL DISCUSSION

HTN Practice and Team Building

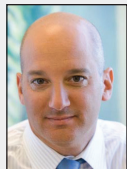
Early adopters/referrers of RDN for hypertension discuss keys to successfully starting a dedicated practice, advice for developing referrer relationships, tips for reaching patients, and more.

With **Tiffany C. Randolph, MD, MHA, FACC**; **Michael J. Bloch, MD, FAHA, FASH, FNLA, FSVM, FACP**; and **Anna K. Krawisz, MD**



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cardiovascular outcomes. It became clear to me that tackling HTN would have the greatest impact and be the most cost-effective strategy. Given that uncontrolled HTN is the greatest modifiable risk factor for developing cardiovascular disease, half of the adult population has HTN, and only roughly one in four people with HTN are controlled, I decided to create the Advanced Hypertension Clinic. When we first started our clinic, RDN wasn't on our radar. However, the system that we put in place positioned us well to be early adopters of this technology.

Dr. Bloch: While it is still early days, our experience has been positive in all aspects. Patients are happy with the efficacy results, my team is encouraged by the safety record, and our interventionalists have been impressed with the technical ease of the procedure. I think it is important to remember that there has been no subgroup of patients who do not seem to respond, and the only predictor of success is baseline blood pressure (BP).

Dr. Krawisz: In my practice, I find there are high numbers of patients with numerous medication intolerances, patients who are not controlled on their current antihypertensive regimens, and patients who have a preference to minimize numbers of medications. For these reasons, I like being able to offer patients a treatment that is not a medication, and I can see the need for nonmedication therapies for HTN. I find that patients are willing to engage in shared decision-making regarding RDN therapy and appreciate that there are varied possible outcomes. Patients have a range of responses and preferences regarding RDN therapy, with some patients enthusiastic after the initial conversation and others who are more skeptical but may be interested after establishing trust with me as a physician. I find that patients appreciate the honesty of the shared decision-making process.

What has been your experience as an early adopter or referrer of renal denervation (RDN) for hypertension (HTN)?

Dr. Randolph: While in cardiology fellowship, I thought about how I could make the biggest impact on improving

How did you go about joining or developing a center of excellence for HTN management?

Dr. Bloch: We have had a resistant HTN program as part of our vascular medicine service line for several years. I think our referring providers have been very happy with the systematic approach we take with our patients with poorly controlled HTN. And, now that we have a third pillar of therapy in addition to lifestyle modification and medications, we have seen increased enthusiasm for our services.

Dr. Krawisz: I started by building up the basic, evidence-based components of HTN care as laid out in the American College of Cardiology/American Heart Association 2017 guidelines, including infrastructure for obtaining high-quality BP data from patients (ie, automated office BP, home monitoring), infrastructure for performing a workup for secondary causes of HTN, and nursing and advanced practice provider support. I found and built on an algorithm for evidence-based medical therapies for HTN. I was also able to leverage programs that already existed at my institution, such as 24-hour ambulatory BP monitoring.

Dr. Randolph: I started by gathering data on HTN control within my health system and partnered with a clinical pharmacist who had similar interests (Kristin Alvstad, PharmD). We worked together to start seeing patients with uncontrolled HTN and developed a system-level strategy for HTN management that included formalized diet and exercise lifestyle improvement classes and an algorithm for antihypertensives that are cost effective, evidence based, and available in combination therapy where able.

This system was ideal for adopting RDN. We already systematically evaluated patients with resistant HTN for secondary causes of HTN and embedded both the process and the documentation into our notes. We also had a cohort of patients who, despite attempts at lifestyle modification and multiple medications and/or intolerances, remained uncontrolled.

What are one or two keys to a successful start in a dedicated HTN practice?

Dr. Bloch: The first and most important piece is a dedicated clinician who wants to take the lead in developing a system of care and being the program champion. Ideally, that would be a recognized clinical HTN specialist, but that is not absolutely necessary; the most important thing is interest and enthusiasm. In many cases, this will be a cardiovascular specialist, but in some cases, it could be a general practice physician or even a

physician extender. Second, it's essential to get administrative buy-in. Having a new procedure as an anchor for the program can be very helpful in getting administrative attention.

Dr. Krawisz: It is critical to have a basic algorithm for working up secondary causes of HTN and an evidence-based medication algorithm for medical therapies. This can simply mean having a list of laboratory studies and imaging to obtain and making inroads with colleagues in endocrinology with whom to discuss cases of primary aldosteronism that will inevitably be found. Many physicians are not aware of best-in-class agents for HTN, and significant improvements can typically be made in patients' medication regimens.

Who comprises a comprehensive HTN team that offers interventional therapies in addition to traditional practice?

Dr. Krawisz: The core members of our team are an HTN specialist and an interventional cardiologist. I find that I also collaborate frequently with specialists in endocrinology and nephrology.

Dr. Bloch: In addition to a clinical HTN specialist and a skilled interventionalist, developing an interventional program also requires engaging interventional lab leadership, an authorization specialist, and potentially a clinical (usually nurse) navigator to ensure timely workup and intervention.

What data have been most compelling in developing referrer relationships?

Dr. Randolph: Given that even small improvements such as a 5 mm Hg reduction in systolic BP have been associated with significantly reduced risk of mortality, heart failure and death, I was eager to offer this technology to my patients. However, I'm more impressed by the long-term data showing even greater average reductions in BP years after the procedure. This is especially promising because when you look at long-term data from other randomized controlled trials (eg, the landmark SPRINT trial), you find that years later, patients who were treated to lower BP goals during the clinical trial no longer achieve those lower BP goals and look very similar to the standard-of-care arm.

Dr. Bloch: Certainly, the safety and efficacy data for RDN are compelling. However, to be honest, I really don't think that has been the biggest driver of our success with referring providers. For us, I think it is the trust that we have developed over the years as a source of compre-

hensive HTN care. It is clear that the majority of patients referred to an HTN program will likely never end up in the interventional suite; having a full range of options for patients is the key. I don't think that in most settings referring providers want to refer to someone who is only interested in doing procedures.

Dr. Krawisz: I find that simply having an infrastructure set up for management of complex HTN is attractive to referrers, as many are looking for help with this patient population. Certainly, data showing that patients are interested in procedural therapies for HTN management and that RDN lowers BP are helpful for RDN specifically.

What have been the biggest barriers?

Dr. Randolph: I thought that the greatest barrier would be patient interest in having a procedure to improve their BP. However, the greatest barrier thus far has been insurance coverage for the procedure. Our health system worked with us to provide this procedure to some of our patients whose BPs were very elevated and who were at increased cardiovascular risk. We have seen impressive BP reductions in most of our patients.

However, we cannot continue to provide this technology if the procedures are not reimbursed.

Dr. Krawisz: Managing BP is time-intensive and requires many touchpoints with patients, particularly for optimization of medications. Building the infrastructure to help with this is something that has taken time.

Dr. Bloch: The biggest barrier to widespread adoption of RDN remains coverage and reimbursement. The good news is that the reimbursement landscape is changing quickly and we will hopefully have more clear guidance and better coverage in the coming months.

With two platforms entering the market simultaneously, what guides your decisions on selecting a platform? Do you advise proficiency in both or focusing more on one technology at a time?

Dr. Randolph: My interventional cardiology partner has used both commercially available systems, and we have had positive experiences with them. I think that the decision to go with one versus the other will vary by institution and depend on the pricing and experience.

As a noninterventionalist who believes in the efficacy of RDN, I don't weigh in on which company to use any more than I would recommend which stent should be used for percutaneous coronary intervention.

Dr. Krawisz: We offer a single platform at our institution, although there are certainly data for both. This likely comes down to a conversation with the interventionalist.

How does your practice reach patients? What has been successful in spreading the word on interventional capabilities, and what are the challenges?

Dr. Krawisz: We have advertised throughout our institution and satellite centers. One patient having a positive experience with our program then seems to result in many patients being referred from their provider and establishes a nice referral base of patients.

Dr. Randolph: We already have a steady flow of patients coming through our Advanced Hypertension Clinic who could benefit from RDN and have not yet started advertising due to the reimbursement barriers. As the reimbursement improves, it will be very important to

have systems in place to ensure that patients are evaluated appropriately before being referred for RDN and to make sure that providers continue to work toward optimal BP control after the procedure.

Dr. Bloch: In general, we have mostly relied on educating our referring providers and having them refer appropriate patients. But every hypertensive program is different. In some settings, it might make sense to reach out directly to potentially eligible patients. In my opinion, we will always have more success if we concentrate our efforts on identifying and activating patients with poorly controlled HTN and presenting a full range of options to them, rather than just concentrating on an interventional approach. ■

Disclosures

Dr. Randolph: Advisory board and speaker engagement for Medtronic and Reor Medical.

Dr. Bloch: Research support from Recor Medical, Amgen, Sonivie, and Medtronic; consultant to/honoraria from Recor Medical, Medtronic, Esperion, Janssen, Novartis, Idorsia, Barologics, and Corcept.*

Dr. Krawisz: Consultant to Medtronic.