COMMENTARY AND PERSPECTIVE

When Hypertension Gets On One's Nerves: Has The Time Come For Renal Denervation?

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Declaration of conflicts of interest: None.

For centuries, hypertension (HTN) has been a major cause of cardiovascular morbidity and mortality. Even now in 2024, despite all the advances in its understanding, adequate diagnosis and treatment of HTN globally is still sorely lacking. In a 2022 publication it is estimated that as much as 54% of hypertensive patients worldwide are undiagnosed. 42% of the hypertensive patients are both diagnosed and treated, yet only 21% of all hypertensive patients have blood pressure (BP) under control(1).

Obviously, on a global scale there are way too many factors and variables that need to be addressed. Yet as practicing clinical physicians we are left to do what we can for the patients we encounter. Assuming there is a program in place to ensure compliance and follow-up, it is estimated that 82% of patients can achieve target BP(2). By simple calculation however, that also means nearly 20% of compliant patients will still not achieve target BP levels despite adequate medical treatment. And amongst those who do, around 20% would be on 3 or 4 anti-hypertensive agents(3). This then begs the question… what else can we do for these difficult-to-control patients?

Renal denervation (RDN) was heralded into the limelight by the SYMPLICITY HTN-1(4) trial which showed RDN provided significant benefit to ambulatory BP readings on follow-up. At that time, RDN seemed poised to achieve a breakthrough in the management of HTN by offering difficult-to-control patients another alternative to an ever-increasing number of medications.

The RDN train however got derailed when several sham-controlled trials revealed little to no benefit with RDN treated patients compared to control(5,6,7,8). It was not until the second generation RDN technology came around and until RDN technique became much more refined that RDN plus medical therapy was proven to be clearly superior to medical therapy alone.

The overall consensus now is that RDN can now provide the same benefits as adding another anti-hypertensive agent(9). And because of this, something that was heretofore unforeseen also occurred. RDN has somehow slowly moved past recommendation guidelines, and has become a therapy of choice for several patient subsets. In more developed countries, a good number of patients who have undergone RDN are those who asked for it. These patients are those who find it difficult to be compliant with medications, patients who are younger, of male gender, have higher ambulatory BP readings, those with concomitant heart failure and those who have numerous side effects from medical treatment for HTN(10). In some countries therefore, it is gradually becoming as mainstream as adding another medicine.

As with any new technology, in our local Philippine setting the main barrier is cost. In patients in whom this is not an issue however, it seems the RDN floodgates are about to be opened. And if RDN trends in other countries are any indication, it is only a matter of time before RDN becomes standard therapy for the Philippine hypertensive patient.

This consensus statement on RDN therapy by the 2023 Philippine Working Group published by Oliva et al (this issue) highlights what RDN is all about, its indications as well as the subsets of patients that are candidates for RDN. By its mere publication, it serves other purposes. It helps increase awareness about RDN's availability, and lends more steam to the local RDN locomotive. Next stop? Better and more consistent BP control for the Filipino hypertensive patient!

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