

Tip 20 (December 2012)

Don't even *think* about sympathetic denervation until patients have been thoroughly evaluated for refractory hypertension.

See my "Comment" from January 2012 advising caution in referring patients for catheter-based renal sympathetic denervation (RSDN).

On the basis of clinical trial data RSDN would appear to be an important advance in the management of patients with the severest forms of refractory hypertension^{1,2}. However, it is early days, and ongoing large clinical trials will shed more light on the indications and contraindications for the procedure.

Over the past 12-18 months RSDN has been available in Auckland mostly through the avenue of a couple of clinical trials. I believe quite a large number of people have had the procedure. I have had no involvement in these, but as I understand it, to qualify for one of these trials you needed to have a systolic BP ≥ 160 despite 3 or more drugs (type and dose unspecified). These are the sort of patients I see every week at my hypertension clinics and I can tell you that the vast majority can achieve target blood pressure with simple medication adjustment.

I am not opposed to RSDN. To the contrary, I am involved in developing a business case to get it established in the Waitemata DHB. I just believe we need to exercise caution and be very selective about who we refer for the procedure. I am actively looking for patients who may be potentially suitable, and whenever I see a potential subject, I add them to a list of potential candidates who require further evaluation. My anecdotal experience to date though, is that of the 880-odd referrals I have seen over the past 4 years, I have only found one individual to refer for the procedure. Several others are still under review, but this gives you an idea of the relative rarity of patients who have both truly refractory hypertension and meet the other criteria (2 single patent renal arteries of good calibre etc).

I was recently referred a 29 year old man who had had RSDN 6 months ago and is still severely hypertensive on 5 drugs. I am still working him up, but he appears to have undiagnosed Conn's syndrome, and the RSDN procedure may prove to have been quite inappropriate.

Take home message: please get your patients reviewed by a hypertension specialist prior to considering referral for RSDN.

1. *Krum H, Schliach M, Whitbourn R et al. Catheter-based renal sympathetic denervation for resistant hypertension: a multicentre safety and proof-of-principle cohort study. Lancet 2010;373:1275-1281*
2. *Symplcity HTN 1 Investigators. Catheter-based renal sympathetic denervation for resistant hypertension: durability of bloodpressure reduction out to 24 months. Hypertension 2011;57:911-917*