Newsletter- Comment (January 2012)

**Catheter-Based Renal Sympathetic Denervation for Resistant Hypertension**

Probably most GP’s are aware of this new technique by now. Using a specially designed equipment, a cardiologist or interventionist performs a renal angiogram and applies circumferential radiofrequency ablation through the walls of both renal arteries. The purpose is to disrupt the renal sympathetic nerves which surround the arteries. A reasonably large clinical trial has demonstrated significant benefit for this procedure in patients with the most resistant forms of hypertension, compared with those who remained on drug therapy alone1,2.

This reason I am bringing this up here is that this procedure is already available in Auckland in private, and the DHB’s are also seriously investigating the feasibility of making it available in the public system. In addition, some of your patients are likely to ask you whether or not this procedure is suitable for them.

My advice is just to exercise some caution. More trials are required, and we currently know nothing about the very long-term effects of this procedure, although it does seem to be safe and effective out to 2 years.

At this stage it should probably be considered only for those with the severest or most resistant forms of hypertension eg systolic BP 180 despite being on 5 or 6 antihypertensive drugs. In my view there is certainly not enough current evidence to use it in patients with well-controlled mild or moderate hypertension who wish to reduce or get off their drugs.

In addition, it is absolutely essential that patients being considered for this procedure be reviewed by a hypertension specialist to exclude treatable underlying secondary causes of hypertension, and (more importantly) to ensure that drug options have been optimised. Often a simple adjustment of medication can be of substantial benefit which my make consideration of this invasive procedure superfluous..

1. *Symplicity HTN-2 Investigators.* [*Renal sympathetic denervation in patients with treatment-resistant hypertension (The Symplicity HTN-2 Trial): a randomised controlled trial.*](http://www.ncbi.nlm.nih.gov/pubmed/21093036)Lancet. *2010;376:1903-1909.*
2. *Symplicity HTN-1 Investigators. Catheter-based renal sympathetic denervation for resistant hypertension: Durability of blood pressure reduction out to 24 months. Hypertension 2011;57:911-917*