6- MONTHS FOLLOW UP IN A REAL LIFE SITUATION AFTER RENAL DENERVATION

ACC Oral Contributions
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Session Title: Prevention: Renal Sympathetic Denervation - A Novel Therapy for Hypertension?
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Background: Percutaneous renal denervation (pRDN) is developed as a new treatment modality for (resistant) hypertension, defined as uncontrolled blood pressure (BP; systolic BP ≥ 160 mmHg) despite the use of at least three anti-hypertensives. The purpose of the study was to evaluate the effects of pRDN performed at our institution.

Methods: All patients that were candidate for pRDN underwent an extensive screening program for (secondary) causes of hypertension. This included BP measurements, laboratory testing and imaging by MRI to confirm anatomical eligibility. Office BP measurements were repeated 6 months after pRDN. Throughout the 6 months follow-up, medication use was strictly monitored.

Results: Since the start of the renal denervation program in our center, we performed pRDN in 23 patients. During follow-up, one patient died 3 months after the procedure, due to a type B dissection of the descending aorta. In total, data of 22 patients at baseline and follow-up were available. Six months after renal denervation, a significant decrease of both both office based systolic blood pressure (197 ±25mmHg at baseline to 173 ±30mmHg at 6 months follow-up; p = 0.001) and office based diastolic blood pressure (106 ±13mmHg vs 93 ±16mmHg; p < 0.001) was achieved. Also, a reduction in medication use was seen (3.32 ±1.62 agents at baseline versus 2.77 ±1.74 at 6 months follow-up; p = 0.019). In total, 5 patients (22%) did not respond to pRDN (<10mmHg systolic BP reduction). No evident predictor for non-responding could be determined.

Conclusions: Although the number of non-responders to pRDN in a ‘real life’ situation seems slightly higher than reported in recent trials, this technique shows promising results after 6 months as reflected by the positive effects on blood pressure measurements. This effect was seen despite a decrease in the amount of antihypertensive drugs used during follow-up.