end stage renal disease (ESRD) patients who have resistant hypertension despite being on multiple drugs and the benefits of RDN in such patients have not been reported. Renal denervation has been studied using proprietary catheters but the same procedure can be done by conventional catheters. The use of additional mapping and imaging techniques can help in precise localization of the RF lesions.

**Methods:** We report use of standard 4mm tip 5F RF catheters with conventional RF generators to give RF lesion to renal arteries using rotational angiography and 3D electroanatomical mapping to plan and guide the placement of these lesions in 9 patients with ESRD and uncontrolled hypertension.

**Results:** There was a significant drop in blood pressure in all the patients: 26.8 ± 13.5 mmHg in systolic and 14.8 ± 6.7 mmHg in diastolic BP at 1 week follow up and 38.0 ± 12.12 mmHg systolic, 19.3 ± 7.21 mmHg fall in diastolic BP at 1 month follow up. The drop in blood pressure was persistent and was 41.8 ± 16.3 mmHg in systolic and 20.4 ± 9.7 mmHg fall in diastolic BP at 6 month follow up as compared to baseline. There were no peri-procedural complications.

**Conclusions:** The use of conventional RF catheters for renal denervation is feasible and effective. Renal denervation in ESRD patients is as effective in controlling hypertension as in patients without renal failure. The use of additional mapping and imaging modalities helps in more precise location of the lesions and may increase the safety of the procedure.

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**VALVE & STRUCTURAL HEART-Aortic Valve**

**Usefulness of a Novel Index in Predicting the Permanent Pacemaker Necessity Following Transcatheter Aortic Valve Replacement**

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**Background:** Permanent Pacemaker implantation (PP) following Transcatheter Aortic Valve Replacement (TAVR) is associated with increased morbidity and costs. However, PP predictors have been scarcely investigated.

**Methods:** We retrospectively analyzed data from a cohort of symptomatic aortic stenosis patients who underwent TAVR and had 2-dimension echocardiogram derived left ventricular outflow tract (LVOT) diameter available. The exclusion criteria were: prior pacemaker and more than 1 valve implanted. We calculated the index as: [valve size (VS)/LVOT]*100. Receiver-operating curve (ROC) was used to determine the binary cut-off value. Variables were selected from univariate analysis and adjusted in the logistic regression model.

**Results:** The study cohort consisted of 450 consecutive patients. From those, 17% had a prior PPM and 9 received more than 1 valve. ROC analysis demonstrated the best cut-off value of 129 for VS/LVOT index (sensitivity=71%, specificity=67%) to predict PP (C-Statistic=0.74; figure). VS/LVOT index as a function of PP probability is depicted (figure). The adjusted determinants of PP following TAVR were: atrial fibrillation (odds ratio (OR): 4.8 [95% Confidence Interval [CI]: 1.6-11.3; p<0.01), left bundle branch block (OR: 2.7 [1.0-7.4]; p<0.05) and VS/LVOT of 129 (OR: 3.5 [1.3-9.3]; p<0.01).

**Conclusions:** A simple and non-invasive index of valve size and the left ventricular outflow tract independently predicts the PP requirement following TAVR with good accuracy. Further validation and incorporation in the clinical practice may improve the valve selection size and decrease the PP incidence.