Conclusions: The current report signifies that catheter-based treatment of mostly elderly patients with severe aortic stenosis is feasible, safe and associated with satisfactory long-term outcomes.

TCT-758

Hemodynamic Changes After Transcatheter Aortic Valve Implantation (TAVI) Significantly Influence Renal Function Thereby Impacting On Mortality

Lisa Voigtländer1, Jury Schewel1, Julia Martin2, Dmitry Schewel1, Christian Frekker1, Peter Wohlmuth1, Thielsen Thomas1, Karl-Heinz Kuck1, Ulrich Schäfer1

1Department of Cardiology, Asklepios Klinik St.Georg, Hamburg, Germany, 2Department of Cardiology, Asklepios Klinik St Georg, Hamburg, Germany, 3Department of Cardiology, Asklepios Klinik St.Georg, Hamburg, Germany, 4Department of General and Interventional Cardiology, University Heart Centre Hamburg, Hamburg, Germany

Background: Acute kidney injury (AKI) is a serious complication after transcatheter aortic valve implantation (TAVI) and patients with preexisting renal impairment seem to be especially prone to AKI. Very few data exist about the impact of invasive hemodynamics on the occurrence of AKI after TAVI. The objectives oft the study were (i) to determine the incidence and predictive factors for AKI with emphasis on invasive hemodynamics, and (ii) to examine short-and longterm outcome of these patients.

Methods: A total of 540 patients (mean age: 80.2±7.1, logES: 24.5±17.9%) undergoing TAVI were included in the study. Patients were divided into three groups according to their glomerular filtration rate (GFR) before TAVI (A: normal renal function i.e. GFR > 90 ml/min; B: impaired renal function i.e. GFR 30-59 ml/min; C: severe impaired renal function i.e. GFR < 30 ml/min). Renal function and survival were recorded over 12 months.

Results: Overall 30-day mortality was 10.2 % and 12-month mortality was 21.5%. Subgroup analysis showed significant differences between the groups with regard to 30-day mortality (A: 5.4%, B: 9.0%, C: 25.0%) and 12-month mortality (A: 15.0%, B: 32.0%, C: 49.0%). AKI occurred in 30 patients (5.6%), of which the majority were patients of group B (16 patients). 30-day-mortality of patients with AKI was 53.3% (16 patients) and 12-month-mortality was 73.3% (22 patients). Systemic arterial pressures were significantly higher before and after TAVI in patients without AKI compared to patients with AKI whereas preprocedural and postprocedural pulmonary and right atrial pressures did not differ between both groups. Predictive factors for

TCT-757

Long-Term Results Following Transcatheter Aortic Valve Implantation

Pablo Codner1, Abid Assadi2, Hana Vaknin-Assa3, Yaron Shapira3, Gabriel Greenberg4, Katia Orvin5, Leor Perl6, Marina Kupershmidt3, Ulrich Schäfer5

1Rabin Medical Center, petah tikwa, Israel, 2Rabin Medical Center, Petach Tikva, Israel, 3Department of Cardiology, Asklepios Klinik St.Georg, Hamburg, Germany, 4Quebec Heart and Lung Institute, Quebec, Canada, 5Cardiovascular Research Foundation, New York, NY, 6Cardiovascular Research Foundation, New York, United States

Background: Transcatheter aortic valve implantation is the contemporary treatment of choice for high/prohibitive surgical risk patients with severe aortic stenosis.

Methods: Outcomes of consecutive 275 (61% female) severe aortic stenosis patients, treated with TAVI and followed up to 3 years (mean 702 days), were analyzed and reported according to the Valve Academic Research Consortium 2 definitions. The primary end point was death from any cause.

Results: This patient group (60% women) was characterized by advanced age (mean 81.7±6.8), high mean log-EuroScore = 19.1±12 and STS score = 8.1±5. The Medtronic-CoreValve® device was utilized in 195(71%) and the Edwards-Sapien® device in 80(29%) of patients. The trans-femoral, trans-axillar, trans-apical, trans-aortic and retroperitoneal route were used in 224, 20, 29, 1 and 1 patients, respectively. Procedural success was 97.1%. One month, 1 year, 2 and 3 years survival rates were 97%, 91%, 85% and 70%; respectively. Peri-procedural/un-hospital stroke was diagnosed in 9 (3.2%) patients. Permanent pacemaker was required in 40 (14.5%) patients: (36 cases in CoreValve and 4 in Sapien valves). Significant paravalvular leak (>moderate) was noted in 22 (8%) patients. After the procedure, mean valve gradients decreased from 51.2±16 to 8.1±7 (p<0.001). Symptomatic improvement was evident during follow up, having 98% of patients in NYHA-FC I or II.