the severity of AR after TAVI as compared to c-MRI. Furthermore, there is a poor correlation between c-MRI and TTE or angiography. Further studies are mandatory to confirm our results in a larger population.

0434
Impact of low flow on long-term survival in patients with severe aortic stenosis and preserved left ventricular ejection fraction: a cardiac catheterization study
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Background: Previous studies suggested that a low flow defined as an indexed stroke volume (SVi) < 35 ml/m² may be an important determinant of outcome in patients with severe aortic stenosis (AS). However, its quantification using echocardiography may be subject to error measurement. The aim of this study is to determine the impact of low SVi determined during cardiac catheterization on long-term survival among patients with severe aortic stenosis and preserved LV ejection fraction.

Methods and Results: Between 2000 and 2010, 768 patients with preserved LVEF (>50%) and severe AS (valve area ≤1 cm²) without other valvular heart disease underwent cardiac catheterization. SVi was derived from catheterization data.

Mean age was 74±8 years, 42% were female, 46% had coronary artery disease and mean LVEF was 72±10%. Overall, low SVi was found in 27% (n=...) of AS patients.

As compared to patients with normal SVi, those with decreased SVi were significantly older (p<0.0001) and had more frequently atrial fibrillation (p<0.0001) in addition, they had lower LVEF (p=0.04); aortic valve area (p=0.0001), mean pressure gradient (p=0.001), systemic arterial compliance (p=0.0001) and higher systemic vascular and pulmonary resistances (p=0.0001).

Ten-year survival was significantly reduced in patients with lower SVi as compared to those with normal SVi (41±5% vs. 63±3%; p=0.0007, Figure). After adjustment for all other risk factors, SVi was independently associated with long-term survival (hazard ratio =0.97, 95% CI: 0.95-0.99; p<0.01).

Conclusion: Low SVi measured invasively is frequent in patients with severe AS and preserved LVEF and is a powerful and independent predictor of survival. SVi should be systematically measured and used as an additional parameter for risk stratification of patients with severe AS.

0196
« Steb by step » expansion of Edwards SAPIEN XT prosthesis during transcatheter aortic valve implantation
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Objectives: To evaluate feasibility, safety and advantage of underexpansion of Edwards SAPIEN XT prosthesis during transcatheter aortic valve implantation (TAVI).

Methods: We retrospectively analyzed 157 transfemoral TAVI procedures performed between October 2012 and December 2013 in the University Hospital of Rouen. Thirty-six (22.9%) patients had intentional underexpansion of the Edwards SAPIEN XT prosthesis since more than 20% area oversizing was anticipated with Computed tomography (CT) assessment of aortic annulus. Underexpansion of Edwards SAPIEN XT prosthesis was performed by reducing the volume of fluid within the valve deployment balloon. The Primary endpoint was aortic regurgitation (AR) at the end of the procedure.

Results: Mean age was 83.4±5.8 years and the mean logistic EuroSCORE of 15.4±6.5%. The initial fluid volume used for valve deployment was 90.1±3.1% of the theoretical total volume (TTV) without significant difference among the 3 sizes of prostheses (90.2±1%, 89.5±2.6%, and 84.8±3.2% for 23, 26, and 29-mm valves, respectively). AR immediately after the first inflation was grade ≤1 in 20 (55.6%) pts, grade II in 9 (25%) pts, and grade III in 7 (19.4%) pts. Stent diameter measured immediately after first inflation represented 94.2±4.1% of the prosthesis theoretical diameter. Post-dilatation was deemed necessary in 14 cases (39.4%). At the end of the procedure, AR was ≤ grade I in 34 (94.4%) patients and grade II in the 2 remaining patients. After post-dilatation, one patient presenting with fatal aortic annulus rupture. Other procedures were safe without stroke, myocardial infarction, or prosthesis migration.

Conclusion: Our study suggest that underexpansion of Edwards SAPIEN XT prosthesis is feasible during transfemoral TAVI procedures when more than 20% area oversizing is anticipated by CT. However, post-dilatation is mandatory in about 40% of cases to reduce significant residual aortic regurgitation but can be complicated by aortic annulus rupture.

0298
Influence of gender on mortality and perioperative outcomes in patients undergoing transcatheter aortic valve implantation: insights from the France 2 registry
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Aim: Transcatheter aortic valve implantation (TAVI) is an alternative to surgical aortic valve replacement for high-risk patients. The relative event rates following TAVI have not yet been well described and seem to differ between genders. We sought to determine gender imbalances in TAVI patients with regard to baseline presentation, management, and prognosis.

Methods and results: A total of 3,972 patients underwent TAVI and were prospectively included in the FRANCE 2 registry. Women (n=1967) presented with older and lower rates of coronary artery disease, chronic obstructive pulmonary disease, renal failure, and arrhythmia, though higher prevalence of hypertension and congestive heart failure (43.7% vs. 39.7%; p=0.010). EuroSCORE was similar between genders. Women presented with smaller aortic annulus and were implanted with smaller bioprostheses.

At 1 month, mortality rates were similar between genders. Multivariate analysis revealed the following independent predictors for 1-month all-cause mortality: female gender; New York Heart Association (NYHA) Class III or IV; transapical approach; moderate to severe postprocedural aortic regurgitation. We observed a specific interaction between gender and EuroSCORE, confirming EuroSCORE as less capable to discriminate women in order to establish 1-month mortality. Women presented with lower 1-year mortality rates than men (19.3% vs. 23.7%; p=0.021). Female gender was an independent predictor of 1-year survival (HR: 0.71, 95% CI: [0.57-0.88]).

Conclusion: Men and women exhibited several differing baseline characteristics, as well as procedural and clinical outcomes. Notably, Euroscore proved inconvenient for 1-month survival prediction in women. Women also presented with an 18.5% decrease in 1-year all-cause mortality compared to men.

0177
Feasibility and safety of early discharge after transfemoral transcatheter aortic valve implantation
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