in DM patients remained significantly higher than in those without DM (24% vs 16%; hazard ratio (HR): 1.62, 95% CI[1.22–2.16], p=0.01). At two-years follow up, cardiovascular mortality continued to be higher in DM patients as compared to non-DM subjects (25% vs 17%; HR: 1.57, 95% CI[1.19–2.06], p=0.01).
Conclusion: DM is a strong predictor of increased mortality after TAVR influencing both – short- and long-term outcome. Therefore, the prognostic impact of DM on real-world outcome after TAVR should be analysed in future studies aside from currently existing risk models.

P4582
Tricuspid valve regurgitation in patients with constrictive pericarditis

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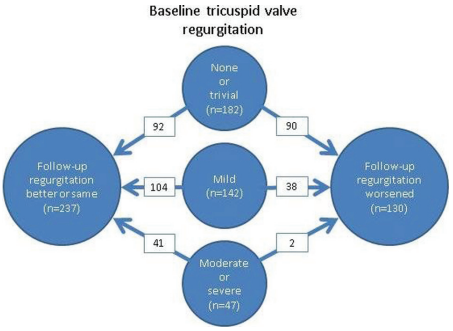
Introduction: Tricuspid valve regurgitation is a common finding in patients with constrictive pericarditis. It is unclear the significance tricuspid valve regurgitation has on outcome.
Purpose: We sought to study whether tricuspid valve regurgitation was associated with increased mortality after pericardiectomy.
Methods: We retrospectively reviewed the records of 450 patients who underwent pericardiectomy for constrictive pericarditis between February 2000 and December 2016. There were no cases of radiation induced constriction or concomitant tricuspid valve intervention. Three study groups were built based on baseline transthoracic echocardiography grade of tricuspid valve regurgitation: none/trivial in 231 patients (51%), mild in 172 (38%), and moderate/severe in 47 (10%) Cochran Armitage Trend test and Cox-proportional hazards regression models were used to assess for an association between study group and mortality.
Results: The patient median age was 61 years (interquartile range 51–69), sex was male in 347 (77%), and ejection fraction was 60% (interquartile range 54–65). Operation included median sternotomy in 390 patients (87%), cardiopulmonary bypass in 282 (63%), and concomitant non-tricuspid valve cardiac operation in 73 (16%). Operative mortality occurred in 23 patients (5%) which included 6 (3%) in the none/trivial study group, 11 (6%) in the mild group, and 6 (13%) in the moderate/severe group (P=0.010). Follow-up transthoracic echocardiography was available in 367 patients (82%) at a median of 7 days (interquartile range 5–21) postoperative. Tricuspid valve regurgitation grade worsened after pericardiectomy in 130 patients (35%) which included 90 patients in the none/trivial study group (49%), 28 in the mild group (27%), and 2 in the moderate/severe group (5%; P<0.001; Figure). Vital status was obtained in all patients at a median of 8.5 years (interquartile range 5.2–11.9) during which 169 patients died (38%). Multivariable analysis of baseline characteristics demonstrated increased risk of mortality in the mild study group (versus none/trivial; odds ratio 1.67; 95% Confidence Interval 1.13–2.47; P=0.010) and in the moderate/severe group (versus none/trivial; OR 2.24; 95% CI 1.34–3.72; P=0.003).



Change in tricuspid valve regurgitation

Conclusions: Tricuspid valve regurgitation is common in patients operated with pericardiectomy for constrictive pericarditis. About one-third of patients experience an increase in regurgitation following operation. Patients with grade mild or worse regurgitation are at increased risk of operative and long-term mortality. Additional study is warranted to determine if tricuspid valve intervention improves outcome.

P4583
Is it safe to spare anticoagulation following mitral valve repair?

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Objective: To evaluate early and late morbidity as well as mortality among patients who received postoperative anticoagulation against those who did not receive anticoagulation after mitral valve repair.
Methods: Retrospective comparative case-control study between February 2000–2017 in a single center. All patients undergoing mitral valve repair for severe mitral regurgitation due to degenerative disorder, Barlow's disease, or annular dilatation were included (n=379). The group of cases consisted of those patients who received elective mitral valve repair and anticoagulation after surgery (Anticoagulation-Group n=104). Patients who received anticoagulation before surgery and those of ischemic origin were excluded. Controls were patients who, by decision of the treating physiscians, did not receive anticoagulation after surgery (Non-Anticoagulation Group n=207). The primary endpoint was 30-day mortality, mortality at follow-up, need for re-intervention at follow-up, and freedom from stroke or events related to anticoagulation at follow-up. We performed a risk-adjusted analysis (propensity score) achieving a comparable population (n=196). The level of statistical significance was established as p<0.05.
Results: Mortality (<30 days) was 1.3%, not different between both groups (p=0.154). The follow-up was completed in 90.1% with a median of 6.2 years (pc25–75: 2.4–9.1 years). There was no significant difference in survival at 9 years of follow-up (Anticoagulation-Group vs Non-Anticoagulation Group: 97.4% ± 1.8% vs 90.0% ± 2.8%, p log rank = 0.170). Neither there was a significant difference in the need for re-intervention (93.2% ± 3.0% vs 97.7% ± 1.3%, p log rank = 0.053), nor in freedom from stroke at follow-up (98.8% ± 1.2% vs 100%, p log rank = 0.665). However, there was a significant difference favouring the Non-Anticoagulation Group in freedom from the combined outcome of stroke and/or events related to anticoagulation (81.2±10.3% vs 98.8% ± 1.2%, p log rank = 0.001). In the risk adjusted analysis similar results were observed for long term survival (p=0.074), for the need for re intervention (p=0.131), and for freedom from stroke at follow-up (p=1.0) while the benefit of the Non-Anticoagulation Group (p log rank = 0.008) was maintained regarding events related to anticoagulation.
Conclusion: Sparing anticoagulation (and its related adverse events) after mitral valve repair surgery is safe, given that it was not associated with a higher rate of stroke, nor with higher mortality, nor was it associated with a greater need for reoperation at 9 years of follow-up.

P4584
Clinical outcomes of transcatheter aortic valve replacement in patients with pure aortic valve regurgitation comparison aortic stenosis

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Limited data exist about safety and efficacy of transcatheter aortic valve replacement (TAVR) in patients with pure native aortic regurgitation (AR).
The aim this study was to evaluate the clinical outcomes of patients with pure native aortic valve regurgitation undergoing with Transcatheter Aortic Valve Replacement and comparing them with patients with aortic stenosis.
Methods: Between April 2008 and December 2017, 20 consecutive patients with severe pure aortic regurgitation (AR) underwent TAVR with the self-expandable aortic valve prosthesis (CoreValve) and 596 patients with severe aortic stenosis (AS).
Results: The mean age and logistic EuroSCORE were (AR vs. AS) 73.8±16 vs. 79.6±6.2 years, p=0.001 and 16.9±9% vs. 17.4±12, p=0.878 respectively.
There were significant differences in measurement of annulus and ascending aortic size (23.7±2 vs. 22±1.8 mm, p<0.001 and 35±6 vs. 31.1±4 mm, p=0.001, respectively). Implantation of prosthesis was performed successfully in 95% patients with AR. The degree of aortic regurgitation after procedure in patients with compared with AS were: none (40% vs. 41.5%) mild (35% vs. 33.6%) moderate (15% vs. 23.4%) and severe (10% vs. 1.5%), p=0.430
The NYHA functional class improved from 3.2±0.61 (baseline) to 1.37±0.51 (one month) and remained stable at follow-up (1.4±0.54). The mortality at 30 days was 10% in patients with AR compared to 3.4% in patients with AS, p=0.157 and there was non-significant differences with late mortality (27.8% vs. 35.4%, p=0.348) after a mean follow-up of 41.4±27 months.
The patients with AR had similar complications after procedure than patients with AS:
Occurrence new-onset left bundle branch block 27.8% vs. 44.3%, p=0.05, stroke 5% vs. 3.9% p=0.533, vascular complications 0% vs. 3.2% p=0.468, acute myocardial infarction 5% vs. 1.7% p=0.306, respectively.
Conclusions: Patients with pure native aortic regurgitation and at high surgical risk might benefit from transcatheter-based therapy. The long-term outcome is favourable compared with patients with aortic stenosis underwent with TAVR

P4585
Percutaneous transluminal alcohol septal ablation in patients with hypertrophic obstructive cardiomyopathy and drug refractory symptoms: intermediate-term outcomes of a prospective cohort

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Background: Percutaneous transluminal alcohol septal ablation (ASA) has been widely accepted as a therapeutic option for patients with hypertrophic obstructive cardiomyopathy (HCM) and drug refractory symptoms.