Results: 20 subjects were eligible for inclusion in the study and 38 matched controls were identified, with both groups evenly matched at baseline. The incidence of in-hospital mortality was 70% in the reinsertion group and 31.2% in the controls (OR 2.2; p=0.005). The composite secondary endpoint of death, LVAD insertion during index hospitalization or discharge to hospice was also significantly higher in the reinsertion group than the controls (85% vs 42.1%; OR=2.0; p=0.002). We also performed multivariate analysis and found that use of multiple IABPs was independently predictive of in-hospital mortality (p<0.05).
Conclusion: Reinsertion of IABP after failure of initial wean is associated with extremely high in-hospital mortality and independently predicts mortality in patients with cardiogenic shock. This study supports the notion that if IABP weaning or removal is unsuccessful, alternative and more aggressive regimens of short or even long-term mechanical support be considered where appropriate such as surgical LVAD or extra-corporeal membrane oxygenation (ECMO).

VALVE & STRUCTURAL HEART

Aortic Valve

CRT-700

ABSTRACT WITHDRAWN

CRT-701

Should a New Bleeding Risk Score be Developed to Account for the Added Risks in Patients With Moderate or Severe Aortic Stenosis Who Undergo Percutaneous Coronary Intervention?

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Background: Aortic stenosis (AS) is associated with an increased risk of bleeding, but little is known about the risk of bleeding during percutaneous coronary intervention (PCI) in patients with AS. In the age of transcatheter aortic valve replacement (TAVR), patients with AS frequently undergo PCI prior to TAVR; therefore, understanding whether these patients have a higher risk of bleeding is critical.
Methods: This retrospective study included 7,926 patients who underwent PCI from March 18, 2004 to January 31, 2013. Patients were categorized according to the presence of hemodynamically significant AS: Moderate/Severe AS (n=354) and Mild/No AS (n=7,572). The National Cardiovascular Data Registry (NCDR) definition of a bleeding event (requiring transfusion, prolonged hospital stay, or drop in hemoglobin >3.0 mg/dL) was used as the primary outcome, and the NCDR PCI Bleeding Risk Score (risk score components in Table) was used to control for the underlying bleeding risk due to baseline patient characteristics.
Results: Logistic regression showed that the NCDR PCI Bleeding Risk Score did predict bleeding outcomes in these patients. Patients with AS had significantly higher NCDR PCI Bleeding Risk Scores as well as higher rates of bleeding events (Table). There was not, however, an independent association between AS and bleeding outcomes. The addition of AS to the risk score using Net Reclassification Improvement did not enhance the model's ability to predict bleeding (p=0.71).

	Moderate/Severe AS	Mild/No AS	p Value
Age, years	79.9 10.98	65.06 12.23	< 0.001
Female Gender, %	45.5	35.9	< 0.001
Congestive Heart Failure, %	37.9	16.7	< 0.001
Congestive Heart Failure Class III or IV, %	20.7	8.4	< 0.001
History of PCI, %	27.5	30.6	0.212
History of Peripheral Vascular Disease, %	27.9	16.1	< 0.001
Chronic Renal Insufficiency, %	37.7	18.0	< 0.001
Myocardial Infarction This Admission, %	27.8	38.1	< 0.001
Cardiogenic Shock, %	2.1	3.5	0.158
NCDR PCI Bleeding Score	18.71 7.55	12.97 7.56	< 0.001
Hematocrit Drop > 15, %	4.1	2.1	0.011
Hematoma, %	5.8	2.2	< 0.001
NCDR Bleeding Event, %	10.3	4.9	< 0.001

Conclusions: These data suggest that the NCDR PCI Bleeding Risk Score appropriately adjusts for bleeding risks in patients with moderate or severe AS. As more patients with increasingly severe comorbidities undergo TAVR evaluation, with some requiring PCI, this risk score may need further adjustment to account for the increasingly complex and frail nature of the TAVR population.

CRT-702

ABSTRACT WITHDRAWN

CRT-703

A Comparison of Post Implant Aortic Valve Gradient of Transcatheter and Surgical Tissue Valves in Symptomatic Severe Aortic Stenosis

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Background: The design and flow profile of transcatheter aortic valve (TAVI) is different from surgical prosthetic valve. We compared the post implantation echocardiographic aortic valve gradient of patients undergoing TAVI using Edwards Sapien in our institution to that of surgically implanted bioprosthetic valves (SAVR) using St Jude Epic, Hancock and Mitrflow valves during the same period.
Methods: Consecutive patients who underwent TAVI between January 2010 and May 2011 were included. Patients who underwent SAVR for native aortic stenosis (AS) were identified from our database and patients who completed at least one follow up transthoracic echocardiogram (TTE) were included for final analysis. The last performed TTE was included for analysis in both groups.
Results: Thirty six patients underwent TAVI valves between January 2010 and May 2011 and TTE data were available for 34 patients who were included for final analysis. Seventy two patients underwent SAVR with a bioprosthetic valve during the same period and TTE data were available for 30 patients who were included for final analysis. Mean age (TAVI 83.4 ± 5.8 vs SAVR 76.3 ± 5.2 years, p <0.001) and logistic Euroscore (TAVI 26.4 ± 12.5 vs SAVR 8.4 ± 5.2, p <0.001) were significantly higher in the TAVI group but the body surface area an important determinant of echo gradient was similar in both groups (TAVI 1.8 ± 0.23 vs SAVR 1.83 ± 0.24, p=0.34). The pre procedure peak aortic valve gradients (TAVI 85.2 ± 20.1 vs SAVR 83.0 ± 22.3, p=0.67) were similar in both groups but the mean aortic valve gradients (TAVI 53.2 ± 14.46 vs SAVR 45.8 ± 12.8, p <0.05) were significantly higher in the TAVI group. The post implant peak gradients (TAVI 21.09 ± 11.5 vs SAVR 30.24 ± 10.6, p <0.005) and mean gradients (TAVI 12.66 ± 7.9 vs SAVR