

Table 1. Demographics and baseline characteristics

Age (years)	78,5 ± 7,6
Sex (M)	16 (44,4)
HT (%)	30 (83,3)
DM (%)	9 (25)
COPD (%)	18 (50)
PVD (%)	11 (30,6)
CABG (%)	9 (25)
Logistic Euroscore	36,4 ± 14,3
Euroscore II	10,2 ± 6,0
STS score	7,9 ± 6,2
LVEF (%)	50,4±12,5
AV Area (cm2)	0,6±0,1
Peak AV Gradient (mm Hg)	75,7±14,3
Mean AV Gradient (mm Hg)	49,3±8,8
PAP (mm Hg)	45,3±12,6
HT=Hypertension; DM=Diabetes Mellitus; COPD=Chronic Obstructive Pulmonary Disease; PVD=Peripheral Vascular Disease; CABG=Coronary Artery Bypass Graft; LVEF=Left Ventricular Ejection Fraction; AV= Aortic Valve; PAP=Pulmonary Arterial Pressure; AF=Atrial Fibrillation; BBB=Bundle Branch Block; PCI=Percutaneous Coronary Intervention	

Table 2. The types and sizes of the bioprothesis implanted and the femoral access route

CoreValve 26 (%)	7 (19,4)
CoreValve 29 (%)	12 (33,3)
CoreValve 31 (%)	7 (19,4)
Edwards Sapien 23 (%)	1 (2,8)
Edwards Sapien 26 (%)	9 (25)
Percutaneous (Prostar XL) (%)	7 (19,4)
Surgical cut-down (%)	29 (80,6)

Table 3. Complications

Second valve implantation (%)	2 (5,6)
Vascular complication (%)	5 (13,9)
Paravalvular AR (< Mild) (%)	3 (8,3)
Stroke (%)	1 (2,8)
VSD (%)	1 (2,8)
All causes mortality (%)	4 (11,1)
Reversible LBBB (%)	3 (8,3)
Persistent LBBB (%)	5 (13,9)
Permanent Pacemaker	4 (11,1)
AR=Aortic Regurgitation; LBBB=Left Bundle Branch Block; VSD=Ventricular Septal Defect	

Cardiac Imaging

OP-082

The Impact of Concomitant Percutaneous Coronary Intervention in High-Risk Patients with Aortic Stenosis and Coronary Artery Disease on Clinical Outcomes in Patients Undergoing Transcatheter Aortic Valve Implantation

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Background: Combined surgical aortic valve replacement (SAVR) and coronary artery bypass grafting (CABG) in patients with aortic stenosis (AS) and concomitant coronary artery disease (CAD) is associated with increased operative risks. There is little knowledge on the outcome associated with performing percutaneous coronary intervention (PCI) in combination with transcatheter aortic valve implantation (TAVI).

Aim of Study: To investigate the outcome of combined TAVI and PCI in high-risk patients with symptomatic high-grade AS and significant CAD.

Methods: From 1/2008 until 6/2012 338 consecutive patients (79.9±6.0 years, logEuroSCORE 18±11%) successfully treated with Medtronic CoreValve™ (n=183), Edwards-SAPIEN™ (n=146) or Symetis Acurate™ bioprosthesis (n=9) were included in the analysis. 221 patients (66%) had CAD. 66 patients (19.5%, 33 female) with significant CAD underwent combined TAVI and PCI. In 58 patients (group A) a staged approach of PCI a mean of 13±9 days prior to subsequent TAVI was chosen. 8 patients (group B) were treated in a single procedure with PCI first. 272 patients underwent only TAVI (group C).

Results: 30 day mortality for patients undergoing TAVI plus PCI was similar to patients with isolated TAVI (12.1% vs. 9.9%; OR=1.4, 95% CI 0.6-3.267; p=0.436). 7 patients (10.6%) of the TAVI plus PCI group had a periprocedural myocardial infarction (NSTEMI) and stroke occurred in two patients (4.7%). There were no significant differences between TAVI plus PCI group vs. TAVI only group with regards to vascular complications and postprocedure acute renal failure. Contrast volume at TAVI implantation was higher in group B compared to group A patients (251±60 vs. 179±73 ml; p=0.022).

Conclusion: CAD is frequent among patients with severe AS undergoing TAVI. Revascularization with PCI can be safely performed in addition to TAVI either as a staged or a concomitant intervention in this high-risk patient population.

Pediatric Cardiology

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OP-083

Efficacy of Very Low Dose Prostaglandin E1 in Duct-Dependent Congenital Heart Disease

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Introduction: Prostaglandin infusion treatment is of vital importance for keeping the ductus arteriosus patency while waiting for either open surgery or invasive transcatheter intervention in duct-dependent congenital heart disease. Our study aimed at defining the lowest effective prostaglandin (PG) E1 dose in patients with inadequacy of both pulmonary blood flow and/or blood mixing (Group 1) and those with inadequate systemic blood flow (Group 2).

Methods: Patients referred to our center within two weeks from birth following the diagnosis of duct-dependent congenital heart disease and the start of i.v. prostaglandin infusion were included in the study. Patients with inadequacy of both pulmonary blood flow and/or blood mixing (Group 1) and those with inadequate systemic blood flow (Group 2) were retrospectively evaluated in two separate groups with regard to the PG E1 starting dose given in the referring facility, the lowest and the highest dose administered in our center, treatment duration, adverse effects and administered treatment.

Results: Of the 95 patients considered in the study, 69 (72.6%) belonged to Group 1 and 26 (27.3%) to Group 2. No difference between the groups could be detected as to sex or birth weight (p=0.95 and 0.42, respectively). A statistically significant difference could not be established for prostaglandin treatment duration, 9.73±0.81 days in Group 1 and 11.6±1.05 in Group 2 (p=0.064). While the prostaglandin starting dose given to both groups in the referring facility was 0.067±0.003 mcg/kg/min, it was reduced after titration to 0.039±0.002 and 0.081±0.005 mcg/kg/min, respectively, and this difference between the two groups was significant (p<0.001). The dose administered to Group 1 while ductus patency was being maintained was 0.0031±0.0001 compared to 0.0042±0.005 mcg/kg/min for Group 2, also a statistically significant difference (p<0.001). No adverse effects, including apnea, were observed during PG E1 infusion.

Conclusion: Our findings indicate that the infusion of prostaglandin at a very low dose (0.003-0.005 mcg/kg/min) is sufficient to maintain the patency of the ductus arteriosus. A higher dose of PG E1 may be necessary in patients in patients with inadequacy of both pulmonary blood flow and/or blood mixing.

OP-084

Echocardiographic and Cardiac Catheterization Findings and Surgical Results of 64 Patients with Congenital Corrected Transposition of Great Arteries (A Single Center Experience)

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Background and Aim: Congenital corrected transposition of the great arteries is a group of clinically heterogeneous diseases because of numerous accompanying