Conclusions: Rotational aortography with CT reconstruction is feasible and can guide TAVR. Sizing at the nadir of the native valve cusps may be a useful modality complementary to transesophageal echocardiography for implant sizing to reduce prosthetic AI. 

TCT-866 Transcatheter Aortic Valve Implantation in Patients With Bicuspid Aortic Valve Disease: Results from the Milan Registry

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Background: Conduction disturbances are relatively common after Transcatheter Aortic Valve Implantation (TAVI). Previous data demonstrated an adverse impact of persistent LBBB on long-term outcomes. However, the role of TAVI in the treatment of the stenosed bicuspid aortic valve has not been clearly demonstrated. Objective: In a consecutive series of patients with a bicuspid aortic valve disease in our center treated with TAVI from November 2007 to May 2012 we included all data from a comprehensive prospective database. All procedures were performed using the Edwards SAPIEN and SAPIEN XT valves, via transfemoral (TF) and transapical (TA) routes. Surgical cutdown was performed for TF access with the SAPIEN valve (22-24F introducers), while percutaneous repair of APL with Amplatzer Vascular Plug III® (AVPIII) and describe complementary to transesophageal echocardiography for implant sizing to reduce prosthetic AI. 

Results: Among them, 224 patients (Group A, 27.3%) developed a persistent LBBB, the remaining 594 patients (Group B, 72.7%) did not. Clinical characteristics were similar between groups. In group A, a low implant was significantly more frequent (15% vs 9.8%, p = 0.02). At 30 days as well as at 1 year (mean follow up of 266±248 days, median 180 days), survival analyses and inherent log rank tests showed that LBBB was not associated with a higher all-cause mortality, cardiac mortality, hospitalization for heart failure. At 30 days, but not at 1 year, Group A had a significantly higher rate of PM implantation. 

Conclusions: In this high volume centers registry, persistent LBBB post CRS-TAVI showed no effect on hard end points. On the other hand, LBBB was associated with a higher short term rate of PM implantation.

TCT-867 Percutaneous closure of paravalvular aortic leak with AVPIII device, clinical follow-up late

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Background: Percutaneous closure of paravalvular aortic leak (APL) has been presented as an alternative to reoperation. Objective: To describe our population undergoing percutaneous repair of APL with Amplazer Vascular Plug III® (AVPIII) and describe clinical events.

Methods: Prospective registry for all patients(p) who underwent percutaneous repair of at least 1 APL. AVPIII device used.

Results: Twelve patients, age 67±14 years. Number of aortic valve surgeries 2.0±3.0. Intervening time from last surgery to percutaneous closure was 7.6±7.6 years. In nine patients there was medical mechanical prostheses, 4p had also a mechanical mitral valve and presented a mitral paravallular leak. Clinical presentation: 30% had heart failure, 10%hemolytic anemia and 66% both. NYHA functional class 3/2/1.6, hematocrit 28.7±5.5, Echo: LVEF 50±6, Systolic PAP: 55±28 mmHg; Numbers of APL 16; Degree of regurgitation 3,2, 1. 

Conclusion: Percutaneous closure of paravalvular aortic leak was successful in 11/12 patients and APL was associated with 30 day and 1 year mortality. 

TCT-868 Incidence, Predictors and Impact of Bleeding after Transcatheter Aortic Valve Implantation

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Background: Data regarding the determinants and outcomes of bleeding after transcatheter aortic valve implantation (TAVI) are limited. The purpose of this study was to evaluate the incidence, predictors and impact of bleeding after TAVI.

Methods: We included 250 consecutive patients (Ps) implanted in our center between May 2010 and Oct. 2011. All procedures were performed using the Edwards SAPIEN and SAPIEN XT valves, via transfemoral (TF) and transapical (TA) routes. Surgical cutdown was performed for TF access with the SAPIEN valve (22-24F introducers), while percutaneous closure (Prostar) was used with the SAPIEN XT valve (18-19F introducers). APL and paravalvular leak. Clinical presentation: 30% had heart failure, 10%hemolytic anemia and 66% both. NYHA functional class 3/2/1.6, hematocrit 28.7±5.5, Echo: LVEF 50±6, Systolic PAP: 55±28 mmHg; Numbers of APL 16; Degree of regurgitation 3,2, 1.

Conclusions: HD LBBB was associated with a higher short term rate of PM implantation.