Results: All patients had uneventful BAVs with this form of Impella support. The in-hospital mortality was 15% with mean hospital length of stay 6 days +/- 3.

Conclusions: BAV supported by Impella LVAD is feasible and efficacious. This particular algorithm permits intervention with only a single arterial access.

TCT-880

CT-Angiography Versus Angiography in Iliacofemoral Tract Diameter Assessment: The Imaging Modality Can Be Determinative In Choice of Approach for Transcatheter Aortic Valve Implantation

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Background: The approach of transcatheter aortic valve implantation (TAVI) is primarily guided by the assessment of iliaco-femoral tract diameter. A minimal diameter of 6mm of the transfemoral tract is required for trans femoral TAVI. Currently, projection angiography (XA) and CT-angiography (CTA) are used interchangeably to evaluate suitability of the iliaco-femoral tract. Discrepancies between XA and CTA remain to be elucidated. We aim to reveal differences in iliaco-femoral tract diameters of TAVI candidates assessed by XA and CTA.

Methods: Diameters of 273 prospectively collected iliacofemoral segments of 39 TAVI candidates were analyzed on both XA and CTA by two observers. We determined the maximal lesion size was < 5mm in 10 patients, < 10mm in 17 patients and > 10mm in 3 patients. Despite the high incidence of morphologically detectable lesions only a single patient developed relevant neurologic symptoms of a stroke. Within patients after surgical AVR only 44% of the patients displayed new cerebral embolic lesions. The maximal lesion size was < 5mm in 10 patients, < 10mm in 6 patients and > 10mm in 3 patients. No clinically relevant strokes were seen in this group. In contrast, cerebral microbleeds were only detected in 13% of the TAVI patients but in 64% of patients after surgical AVR.

Conclusions: New embolic cerebral insults and microbleeds detected by MRI were seen both patient groups (TAVI vs surgical AVR). Patients after surgical AVR showed more microbleeds, whereas patients after TAVI showed more embolic ischemic insults. However, despite the high percentage of MRI detected lesions in both groups, relevant neurological symptoms were very rare and mostly transitory.

TCT-882

Has Balloon Aortic Valvuloplasty For Severe Aortic Stenosis Improved Outcomes In The Transcatheter Aortic Valve Replacement Era?

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Background: The introduction of transcatheter aortic valve replacement (TAVR) has led to a revival in balloon aortic valvuloplasty (BAV) as treatment for patients with severe aortic stenosis. The maximal lesion size was < 5mm in 10 patients, < 10mm in 17 patients and > 10mm in 3 patients. No clinically relevant strokes were seen in this group.

Methods: A cohort of 472 patients underwent 538 BAV procedures. The cohort was divided into two groups: Group I: 296 (55.0%) procedures before 2010 and Group II: 242 (45%) procedures after 2010. Successful BAV was defined as reduction >40% in the mean gradient and/or increase in aortic valve area >40%. Clinical, hemodynamic, and follow-up mortality data were collected.

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\text{AVA Mean Grad} \quad \text{Pre} \quad 0.55 \quad 45 \\
\text{Post} \quad 0.68 \quad 32
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