

**DIFFERENT IMPACT OF GENDER ON EARLY AND LATE OUTCOME AFTER TRANSCATHETER AORTIC VALVE REPLACEMENT**

Poster Contributions
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Background: Transcatheter aortic valve replacement (TAVR) evolved as alternative to surgical valve replacement in high risk patients (pts) with severe aortic stenosis. However, it is unclear whether women and men benefit equally from this therapy. The aim was to analyze the impact of gender on 30-day and long-term outcome in TAVR pts.

Methods and Results: Pts with severe aortic valve stenosis in which TAVR was performed were included into the analysis. All primary endpoint-related events were adjudicated according to the Valve Academic Research Consortium 2 definitions (VARC2). Between 2006 and 2014, a total of 1824 pts were treated with a variety of TAVR device at our institution. Gender distribution was unequal throughout the study population with 56.5% of pts being female. Women and men did not differ with regard to porcelain aorta (2.2 vs. 2.7%) and pulmonary hypertension (35.8 vs. 32.0%). In contrast, cerebrovascular disease (12.2 vs. 17.9%) and coronary artery disease were less prevalent in women (34.5 vs. 65.0%, $p<0.05$). Additionally women had less often undergone previous CABG (5.2 vs. 21.9%). LVEF was reduced in male pts (50.7 ± 12.8 vs. 57.8 ± 11.1 %, $p<0.05$). Female pts were significantly older (81.1 ± 5.2 vs. 79.1 ± 6.1 years), were more often diabetic (43.0 vs. 31.3%), had a lower logEuroSCORE (18.6 ± 12.0 vs. 19.9 ± 14.3), but a higher STS Score (9.0 ± 6.2 vs. 7.4 ± 6.2 , all $p<0.05$). TAVR effectively increased the aortic valve orifice area accompanied by a decline of aortic valve gradients in both men and women with high device success (96%). The occurrence of any VARC2 bleeding complications (41.0% vs. 33.2%) and neurologic event was higher in women (5.9% vs. 2.9 %, both $p<0.05$), however all-cause mortality at 30days was not different (7.3% vs. 6.7%, $p>0.05$). Mortality was significantly higher in men at one year and consistent up to the five year follow-up (one year: 18.9% vs. 23.8%; five year 33.8 vs. 39.0%, both $p<0.05$). At one year this increase was primarily driven by non-cardiovascular mortality (3.3% vs. 5.8%, $p<0.05$).

Conclusions: Women and men treated with TAVR differ with regard to the risk profile but not in short term mortality. Mortality increases for male pts, driven by non-cardiovascular causes.