**FEMALE GENDER IS A PREDICTOR OF VASCULAR COMPLICATIONS IN PATIENTS UNDERGOING TRANS-CATHETER AORTIC VALVE REPLACEMENT FOR SYMPTOMATIC SEVERE AORTIC STENOSIS: A SINGLE CENTER EXPERIENCE**

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**Objective:** Vascular complications have a significant impact on morbidity and morality associated with transcatheter aortic valve replacement. Despite the advancement of TAVR technology with newer generations of valves, there remains a paucity of data on preventing vascular complications. We analyzed clinical and procedural factors that could impact the rate of of vascular complications in our TAVR population.

**Method:** We retrospectively collected demographic, clinical and procedural data for all patients who underwent TAVR from December 2012 to June 2017. In particular, we studied the impact of gender, co-morbidities, and factors associated with vascular access on rates of vascular complications. Vascular complications including hematoma, retroperitoneal bleed, and pseudo-aneurysm are defined according to the TVT registry. Chi-square tests were used to compare the complication rates between groups. All statistical tests were two-tailed, and P <0.05 was considered significant for all comparisons.

**Results:**Of the total 334 TAVR patients, the mean age was 83 years (±8.6) with 52.7% males.Females were found to have higher risk of developing vascular complications in comparison to male patients (p=0.02, OR=0.30 [CI .11-.86]) with males having a significantly lower complication rate compared to females (2.84% vs. 8.86%). Prior history of CAD, DM, HTN, HLD, CAD, PVD and smoking were not statistically significant predictors of vascular complications. Sheath size was not a statistically significant predictor of vascular complications.

**Conclusion:**Female gender was found to be a predictor of vascular complications in patients undergoing TAVR in our single center experience. Surprisingly, factors associated with vascular access were not found to be predictors of vascular complications. Further studies are needed to appropriately risk stratify patients undergoing TAVR, and to introduce targeted intervention to reduce the rate of vascular complications.