

Comparison of Procedural Characteristics and Outcomes in Men versus Women Undergoing Mitral Edge to Edge Repair

Disclosures

- There was no external funding for this study.

Background

- Among patients undergoing mitral transcatheter edge to edge repair (M-TEER), there is paucity of data regarding sex differences.

Methods

- We performed an observational study of 380 patients undergoing M-TEER at a single institution between (2014-2022).
- Baseline characteristics, procedural variables and outcomes were compared between men and women

Results

- A total of 176 (46%) women and 204 (56%) men were treated with M-TEER during the study period.
- Women were older than men [W: median age 80 years (72-86) vs. M: 78 (69-84), $p=0.055$] but had less co-morbidities including diabetes (W:24% vs. M:38%, $p=0.005$), previous CABG surgery (W:15 % vs. M:30%, $p=0.001$), or an implantable cardioverter defibrillator (ICD) (W:16% vs. M:31%, $p=0.001$) resulting in similar STS scores (W:4.4 [2.1-9.4] vs. M:4.4 [2.7-6.9], $p=0.812$).
- Women had smaller left ventricular end-systolic (W: 3.7 ± 1.2 cm vs. M: 4.6 ± 1.2 cm, $p<0.001$), diastolic dimensions (W: 5.1 ± 0.9 vs. M: 5.7 ± 1.0 , $p<0.001$), and higher ejection fraction (W: 56% [38-61] vs. M: 44% [29-58], $p<0.001$) than men.
- There were no differences in MR severity or etiology (primary vs. secondary).
- Women required fewer devices (W:1 clip 78% vs. M:1 clip 61% $p=0.002$) and achieved similar rates of MR reduction (residual MR \geq moderate W: 5%, M: 9%, $p=0.126$) but with higher residual gradients (W: 4 [3, 5] mmHg, M: 3 [2,4] mmHg, $p=0.002$).
- There were no differences in survival at discharge, 30-days, or 1-year. MACE (stroke, MI, all-cause mortality) did not differ between sexes at discharge, 30-days, or 1-year.

Conclusions

- Women undergoing M-TEER achieved similar rates of MR reduction as men but with fewer clips and higher residual gradients.
- No sex differences were observed in clinical outcomes.

Contributors

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