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SURVIVAL OF PATIENTS WITH RHEUMATIC AND NON-RHEUMATIC MITRAL VALVE STENOSIS AFTER VALVULOPLASTY

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Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at https://www.abstractsonline.com/pp8/#I/10461

Session Title: Interventional and Structural Flatboard Poster Selections: Non-Aortic Structural Heart Disease Abstract Category: 18. Interventional and Structural: Non-aortic valve structural heart disease

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Background: Non-rheumatic (NR) mitral stenosis (MS) due to mitral annular calcification (MAC) presents in elderly patients and is difficult to treat due elevated surgical risk. In search for alternative treatments, mitral balloon valvuloplasty (MBV) has been performed in non-rheumatic mitral stenosis but no outcomes have been described in this cohort.

Methods: Single center retrospective review of 85 consecutive MBV cases at Henry Ford from 3/2013 to 4/2021. Clinical and procedural outcome variables are reported as median and interquartile ranges (IQR). Kaplan-Meier method was used to estimate survival. Chi-squared and Wilcoxon-signed rank tests were used to compare categorical and continuous variables respectively using 95% confidence intervals for statistical significance.

Results: Of 85 MBV cases, 50 and 35 were performed for rheumatic (R) and NR MS respectively. NR patients tended to be older and were more likely to have hypertension, diabetes, coronary artery disease, chronic kidney disease, aortic valve procedures. Rates of ≥moderate-severe mitral regurgitation (MR) (R 18% vs. NR 12% p=0.4) and procedure success (R 57% vs NR 42.9% p=0.2) were similar. Median follow up for the entire cohort was 0.5 yrs [0.1, 2.1]. Survival was significantly better for rheumatic cases (Figure).

Conclusion: Survival of NR MS post-valvuloplasty is significantly attenuated as compared to those with R MS. Larger prospective studies are necessary in understanding optimal bridging therapies for patients with MAC.



Rheumatic vs. non-rheumatic mitral valve stenosis survival post-balloon valvuloplasty