EFFECT OF PHARMACOLOGICAL AGENTS ON SURVIVAL IN PATIENTS WITH DEGENERATIVE MITRAL STENOSIS: RESULTS FROM A COHORT OF 1004 PATIENTS

ACC Moderated Poster Contributions
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Authors: Gaurav Tyagi, Patricia Dang, Ioana Pasca, Reena Patel, Ramdas Pai, Loma Linda University Medical Center, Loma Linda, CA, USA

Background: Little is known about the biological behavior of degenerative mitral stenosis (DMS). We investigated the effect of common cardiac medications on survival in a large cohort of patients with DMS.

Methods: We searched our echocardiographic database for patients with DMS defined as severe mitral annular calcification with extension to the leaflets without commissural fusion and transmitral mean diastolic gradient of at least 2 mmHg. This yielded 1004 patients forming the study cohort. Chart reviews were performed and mortality data was collected from NDI.

Results: Patient characteristics: Age 73 ± 14, women 73%, CAD in 49%, AF in 28%; diabetes mellitus in 50%; chronic renal insufficiency in 37%, LVEF 65 ± 14%, 44% on a statin, 56% on a beta blocker (BB), 38% on a calcium channel blocker (CCB), 49% on angiotensin converting enzyme inhibitor or receptor blocker (ACEI/ARB) and 10% on digoxin. Over a follow-up of 3.5±2.8 years, there were 549 deaths with a 5 year survival of 47%. Pharmacological predictors of better survival included use of ACEI/ARB (p= 0.02) and statin (p=0.07) while digoxin was associated with a higher mortality (p= 0.0003). Use of BB or CCB had neutral effect on survival. Adjusted for age, gender, LVEF and diabetes, use of ACEI/ARB (p=0.001) and statins (p=0.04) were predictors of better survival and digoxin a predictor of higher mortality (p=0.007).

Conclusion: ACEI or ARB and statins confer survival benefit in patients with DMS and use of digoxin may be associated with a higher mortality.