Is There Benefit in a Mitral Procedure in Patients With AS and MR Undergoing AVR?

Merin, Ofer; Ofir, Shai; Butnaru, Adi; Tauber, Rachel; Bitran, Daniel; Silberman, Shuli
Shaare Zedek Medical Center, Jerusalem, Israel

Introduction: Patients undergoing AVR for aortic stenosis occasionally have concomitant mitral regurgitation. The proper approach to the mitral valve in such cases as yet remains unresolved. We compared late outcomes in patients with aortic stenosis and mitral regurgitation undergoing AVR with or without a mitral procedure.

Patients: A retrospective review of our database identified 118 patients with aortic stenosis and moderate or greater MR: 88 underwent isolated AVR (group 1), 30 AVR with a concomitant mitral procedure (group 2- repair in 12, replacement in 18). Patients in group 1 were slightly older: 73±8 vs 64±13 years (p=0.06). The groups were similar with respect to operative risk and LV function. Follow-up was conducted using data from the outpatient clinic files, echocardiogram reports and telephone interviews. The primary endpoint was survival, secondary endpoints were NYHA class and degree of MR. Late follow-up was 100% for survival.

Results: Overall operative mortality was 5% and similar between groups. Echocardiogram at 1 month after surgery was available in 79 (94%) and 25 (89%): For groups 1 and 2 respectively, residual MR grade was 2.8±0.8 and 1.6±1 (p=0.0007); NYHA class at follow-up was 2.3±0.7 and 2±0.6 (p=ns). By Kaplan-Meier estimates, survival at 5 and 10 years was 83 and 62% for the AVR group and 83 and 62% for the mitral group (p=ns). Predictors for late survival by Cox regression were age (p=0.02), operative group (p=0.02), and residual MR (p=0.01).

Conclusions: In patients with aortic stenosis and mitral regurgitation, residual MR predicts poorer survival after AVR. The addition of a mitral procedure did not increase the operative risk. It may be beneficial in these patients to address the mitral valve at the time of aortic valve replacement.