26480 - VALVE REPAIR IS FEASIBLE IN COMPLEX MITRAL PATHOLOGY

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Introduction: Repair of the mitral valve is generally accepted as the preferred surgical treatment for patients with mitral regurgitation. Complex mitral valve pathology continues to pose significant operative challenges, particularly in patients with bileaflet involvement. This study examines our experience of mitral valve repair, including patients with anterior or bi- leaflet pathology.

Methods: All patients undergoing mitral valve preserving procedures by a single surgeon between 1999 and 2004 were included in this study on an intention-to-treat basis, guided by pre-operative echocardiography. Data was prospectively collected and analyzed using SPSS 10.0. Eighty-one patients underwent leaflet or sub-valvular apparatus repair with a mean age of 66 (range: 37-86). At least one episode of congestive heart failure occurred in 52% of patients with 56% of the entire group having a New York Heart Association class of III or IV. LV function was grade I in 67% of cases and 53% had pulmonary hypertension.

Results: Thirty-day or in-hospital mortality was 2.5% (2 patients), with one patient presenting with acute ischemic ventricular septal defect, and the other suffering cerebral vascular accident post urgent combined coronary and mitral procedure. Valvular pathology included degenerative (84%), ischemic (7%), infectious (6%) and rheumatic (2%). Forty-six percent of repairs involved only the posterior leaflet, 16% only the anterior, and 38% involved bileaflet repair. Ninety-five percent of intended repairs were successfully completed intra-operatively. There were 4 conversions to replacement. Ninety-six percent of patients who underwent mitral repair had mild or less mitral regurgitation and a significant decrease in LV end-diastolic dimension (5.95 vs. 5.32 cm., mean) at late follow up ($p<0.001$).

Discussion: Our experience demonstrates that repair of complex mitral pathology is safe and successfully achieved in the vast majority of patients.