

Results of Anterior Leaflet Compared with Posterior Leaflet, Mitral Valve Prolapse Repair

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Background

The short and long term results of mitral valve repair for anterior leaflet prolapse (ALP) is considered less favorable than those reported for posterior leaflet prolapse (PLP). We compared mid term results of PLP repair versus ALP or bileaflet prolapse (BLP) repair.

Methods

From 1/2004, 377 patients underwent mitral valve repair. Valve pathology was degenerative in 263 (70%) patients. 184(70%) had PLP, and 79(30%) had ALP/BLP. Mean age was 60±12 and 58±13, in PLP and ALP/BLP groups, respectively (p=0.22). Valve repair techniques included leaflet resection (76% and 28%), annuloplasty (97% and 98%), artificial chordae (26% and 67%), in PLP and ALP/BLP groups, respectively. Minimal invasive approach was used in 54/184 (29%) patients in PLP group and in 5/79 (6.3%) patients in ALP/BLP group.

Results

There were 2 (1.1%) in hospital death in PLP group, and none in ALP/BLP group. Mean follow up was 15±16 month. Freedom from reoperation was 97.8% (180/184) and 98.7% (78/79), in PLP and ALP/BLP groups, respectively. There were no late deaths in both groups. NYHA improved from 2.1±0.9 to 1.5±0.6 in PLP group versus 2.1±0.8 to 1.5±0.7 in ALP/BLP group. Echocardiography follow-up revealed 90% (166/184) and 87% (69/79) of patients (PLP and ALP/BLP groups, respectively) were free from moderate or severe mitral regurgitation (p=0.63).

Conclusions

Mid term results of anterior or bileaflet mitral valve prolapse repair are comparable to the standard posterior leaflet prolapse repair.