OUTCOMES OF EARLY MITRAL VALVE REPAIR FOR SEVERE DEGENERATIVE MITRAL REGURGITATION IN PATIENTS WITH NO OR MILD SYMPTOMS: IMPACT OF COMORBID CONDITIONS

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Background: Recent guidelines recommend mitral valve (MV) repair for severe mitral regurgitation (MR) before symptom onset or left ventricular (LV) dysfunction. However, it is still controversial whether MV repair for asymptomatic severe MR patient with preserved LV function and without atrial fibrillation (AF) or pulmonary hypertension (PH) should be performed even at experienced surgical center.

Methods: A total of 351 patients (age: 55±13 year-old, male/female: 216/135) who underwent MV repair for MR due to MV prolapse with only modest symptoms (NYHA≤2) were evaluated. Patients were divided into 2 groups: group B, consisting of 147 patients with at least one of the following conditions; left ventricular (LV) ejection fraction (EF) ≤60%, LV end-systolic dimension (Ds) ≥40mm, AF, or PH, and group A, the remaining 204 patients without any of these conditions. Long-term clinical outcomes were compared between the 2 groups.

Results: The mean follow-up period was 5.8 years. The Kaplan-Meier survival curve showed that group B had higher mortality than group A at 10 years (A vs B; 96% vs 87%; P=0.013). Valve-related events, including major bleeding, thromboembolism, re-do MV surgery, and admission due to heart failure were significantly fewer in group A than in group B at 10 years (A vs B; 92% vs 76%; P=0.005).

Conclusion: Early MV repair before LV dysfunction, PH or AF provides better clinical outcomes. Early repair should be considered for patients with degenerative MR at experienced surgical center.