

### **P7. Optimal Timing Of Mitral Valve Repair In Patients With Severe Degenerative Mitral Regurgitation**

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**OBJECTIVES:** The optimal timing of mitral valve (MV) surgery in patients with severe mitral regurgitation (MR) is still controversial. The purpose of this study was to evaluate the association between pre-operative echocardiographic indices and clinical results in patients with MR due to MV prolapse who were operated on in late timing according to the guidelines.

**METHODS:** A total of 509 patients (age: 56±14 year-old, male/female: 291/218) who underwent MV repair for MR due to MV prolapse were evaluated. Patients were divided into 2 groups: group B, consisting of 256 patients with at least one of the following conditions; left ventricular (LV) ejection fraction (EF) ≤60%, LV end-systolic dimension (Ds) ≥40mm, atrial fibrillation (AF), or pulmonary hypertension (PH), and group A, the remaining 253 patients without these conditions. Long-term clinical outcomes were compared between the 2 groups.

**RESULTS:** Patients characteristics and pre-operative echocardiographic indices were shown in the table. The mean follow-up period was 6.1 years. The Kaplan-Meier survival curve showed that group B had higher mortality than group A at 1, 5, 10 years (A vs B; 99% vs 97%, 97% vs 94%, 93% vs 83%: P<0.001).

**CONCLUSIONS:** MV repair before LV dysfunction, PH or AF provides better clinical outcomes. Early surgery should be considered for patients with degenerative MR.

#### **Patients Characteristics**

	Group A	Group B	P value
N	253	256	
Age(y)	53.6±15.2	58.2±13.0	<0.01
Gender(F/M)	113/140	105/151	0.41
NYHA? III	44	99	<0.01
LVEF(%)	70±6	61±9	<0.01
LVDd(mm)	54±6	57±7	<0.01
LVDs(mm)	32±5	37±7	<0.01
LAD(mm)	43±7	51±10	<0.01