

P141. Predictors Of Exacerbation Of Mitral Regurgitation and Reverse Remodeling After Operation For Post-infarction Left Ventricular Remodeling

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OBJECTIVES: We examined preoperative predictors of exacerbation of mitral regurgitation (MR) and of reverse remodeling after coronary artery bypass grafting (CABG) with mitral annuloplasty (MAP) or left ventricular reconstruction (LVR).

METHODS: The study included fifty-two patients who underwent MAP+CABG (n=17), LVR+CABG (n=14), and MAP+LVR+CABG (n=21), and completed the mid-term postoperative echocardiographic study. MR exacerbation was defined as new onset or recurrence of MR. Reverse remodeling (RR) was divided into diastolic RR defined as more than 5mm decrease from preoperative value in LV diastolic diameter (LVDd) and systolic RR defined similarly in LV systolic diameter (LVDs). Preoperative variables included the LV Tei index (cardiac performance index), LV ejection fraction (LVEF), deceleration time (DcT), LVDd, LVDs, LV end-diastolic volume index (LVEDVI) and end-systolic volume index (LVESVI). Multivariable analyses were performed using a stepwise logistic regression.

RESULTS: The LV Tei index was a sole significant predictor ($p=0.026$) to postoperative MR exacerbation. The predictors of diastolic RR included the LVDd ($p=0.020$), LVDs ($p=0.040$), and EDVI ($p=0.041$). The predictors of systolic RR included the LVDd ($p=0.018$) and ESVI ($p=0.023$).

CONCLUSIONS: Postoperative MR exacerbation was linked to the preoperative LV Tei index which reflects overall systolic and diastolic LV performance. Reverse remodeling was related not to preoperative functional but to morphologic variables.