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Impact of Mitral Valve Repair in Patients with End-Stage Congestive Heart Failure

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ABSTRACT

Objective: The utility of mitral valve repair in patients with Mitral Regurgitation (MR) and advanced CHF remains controversial. **Methods:** 37 patients with MR and Left Ventricular Ejection Fraction (LVEF) < 35% operated upon between April 2000 and July 2008 were included in the study. Cardiac outcome parameters such as LVEF, left ventricular internal diameter in diastole (LVIDd), NYHA class and mitral regurgitation before and after surgery were retrospectively reviewed. Differences in survival between patients with pre-op EF \leq 25% versus pre-op EF > 25% as well as patients with LVIDd < 6 cm versus LVIDd \geq 6 cm were compared. Significant independent prognostic factors for overall survival were also identified. **Results:** Operative mortality was 0% for the group. There were significant reductions in NYHA Class ($p = 0.0004$), mitral regurgitation ($p < 0.0001$) and LVIDd ($p = 0.021$) after surgery. There was significant increase in LVEF after surgery ($p = 0.010$). There were no significant differences in cardiac outcome changes between patients with pre-op EF \leq 25% versus pre-op EF > 25%. There were no significant differences in cardiac outcome changes between patients with LVIDd < 6 cm versus LVIDd \geq 6cm. Moreover, there were no significant differences in overall survival between patients with pre-op EF \leq 25% versus pre-op EF > 25%, and between patients with LVIDd < 6 cm versus LVIDd \geq 6cm. There were no significant independent prognostic factors for mortality. **Conclusions:** MV repair in patients with low LVEF and MR can be performed safely, with significant improvement in LVEF and symptom profile. No survival difference were noted between those patients with severely depressed LVEF or those with elevated ventricular dimensions (LVIDd) when compared to those with less severe but still significant cardiac impairment. Consideration should be given to these patients as an option prior to transplantation.

KEYWORDS

Mitral Valve Repair; Mitral Regurgitation; Heart Failure

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