

Early Outcomes in Patients with Severe Dilated Left Ventricle Disease after Heart Valve Surgery

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Abstract

Objectives: The study sought to examine the prognostic impact of valvular surgery in patients with severe dilated left ventricle (DL) and assess morphological and functional changes of DL in the early period after operation. **Methods:** From January 2013 to December 2018, at a single center, 126 patients with severe dilated left ventricle (DL group) and 511 patients with normal sized left ventricle (NL group) underwent heart valve surgery. Retrospective review of the procedure and the postoperative clinical course, including echocardiography were analyzed in 6 to 12-month follow up. **Results:** Compared with NL group, DL group had significantly higher postoperative all-cause mortality (3.2% vs 1.4%) and complication rate, as well as longer duration of mechanical ventilation and vasoactive agents support. In DL group, 4 (3.2%) patients died in the early postoperative stage among which 2 (1.6%) patients died from multiple organ failure (MOF) secondary to severe low-output syndrome, 2 (1.6%) patients died from ventricular fibrillation. The DL group had longer time of mechanical ventilation and vasoactive agents support than NL group postoperatively. In DL group, the progressive regression of end-diastole diameter (LVEDD) was observed during the follow-up; whereas left ventricular ejection function (LVEF) and left ventricular fractional shortening (LVFS) showed a temporary decrease in early postoperative stage and then improved gradually. **Conclusion:** Heart valve surgery performed in an experienced center, along with sophisticated perioperative management, could bring satisfying early outcomes to patients with severe dilated left ventricle.

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