Partial left ventriculectomy for ischemic dilated cardiomyopathy


Abstract
Left ventricular reduction surgery is a new surgical option for treatment of end-stage cardiac dysfunction. Little is known about this operation in patients with ischemic dilated cardiomyopathy.

From January 1995 to December 1998, 37 ischemic patients (mean age of 64.3 ± 11.0 years) underwent partial left ventriculectomy. Thirty-three patients were male. Preoperatively most patients were in NYHA class IV. Cardiac index (CI), stroke index (SI), and ejection fraction (EF) were 1.9 ± 0.3 l/m2/min, 23 ± 6 ml/m2, and 19 ± 6%, respectively.

Associated procedures were coronary bypass in 31, mitral valvuloplasty in 21, aortic or mitral valve replacement in five, and dynamic cardiomyoplasty in two patients. Two patients (5%) died early and 10 patients late. First- and 2nd-year actuarial survival was 66%. In patients fulfilling transplant criteria, 1- and 2-year survival rate was 82%. One patient required intraoperative left ventricular assist device (LVAD) implantation and two patients required VAD implantation during the follow-up period. Postoperatively, cardiac index (CI), stroke index (SI) and ejection fraction (EF) rose significantly (p=0.0001) to 3.0 ± 0.3 l/m2/min, 36 ± 5 ml/m2 and 38 ± 10%, respectively. Left ventricular end-diastolic diameter decreased from 70 ± 8 to 55 ± 8 mm postoperatively. Currently, 90% of the survivors are in NYHA class I or II.

In patients with ischemic dilated cardiomyopathy, left ventricular reduction surgery improves objective and subjective parameters of cardiac performance significantly during early and intermediate follow-up.

Keywords Batista procedure, Dor-operation, ischemic dilated cardiomyopathy, partial mitral valve repair, ventriculectomy.

1999 Elsevier Science B.V.
ISBN 0-444-50279-3