

Abstracts - 27th EACTS

014

SHOULD MILD-TO-MODERATE ISCHAEMIC MITRAL REGURGITATION BE CORRECTED IN PATIENTS WITH IMPAIRED LEFT VENTRICULAR FUNCTION UNDERGOING SIMULTANEOUS CORONARY REVASCULARIZATION?

E. Prifti¹, M. Bonacchi², G. Giunti², E. Kajo¹, K. Krakulli¹, A. Fagu¹, A. Baboci¹

¹Division of Cardiac Surgery, Medical University of Tirana, Tirana, Albania;

²Division of Cardiac Surgery, Policlinico Careggi, Florence, Italy

Objectives: The objective of this study was to assess the feasibility of mitral valve (MV) surgery combined with coronary artery bypass grafting (CABG) in patients with mild-to-moderate and moderate ischaemic mitral valve (MV) regurgitation and impaired left ventricular (LV) function.

Methods: Between 1996 and 2012, 90 patients (group 1) and 70 patients (group 2) with grade II-III ischaemic MV regurgitation and LV ejection fraction (LVEF) between 17% and 30% underwent combined MV surgery and CABG (group 1) or isolated CABG (group 2). LVEF (%), left ventricular end diastolic diameter (LVEDD) (mm), left ventricular end diastolic pressure (LVEDP) (mmHg), and left ventricular end systolic diameter (LVESD) (mm) were

27.5 ± 5, 67.7 ± 7, 27.7 ± 4, and 51.4 ± 7 in group 1 versus 27.8 ± 4, 67.5 ± 6, 27.5 ± 5, and 51.2 ± 6 in group 2 respectively. MV repair was performed in 73 (81%) patients and MV replacement in 17 (19%) patients in group 1.

Results: The hospital mortality was nine (10%) patients in group 1 vs nine (12.8%) in group 2 ($P = NS$). Within six months after surgery, the LV function and its geometry improved significantly in group 1 vs group 2 (LVEF $P < 0.001$, LVEDD $P = 0.002$, LVESD $P = 0.003$ and LVEDP $P < 0.001$). The regurgitation fraction decreased significantly in group 1 patients after surgery ($P < 0.001$). There was an inverse strong correlation between postoperative forward cardiac output and regurgitation fraction ($P < 0.001$). The LVEF and LVESD improved significantly in group 1 versus group 2 patients, $P = 0.04$ and $P = 0.02$ respectively. The cardiac index increased significantly in groups 1 and 2, $P < 0.001$ and $P = 0.03$ respectively. The overall survival at 5 years in group 2 was significantly lower than group 1 ($P < 0.009$).

Conclusions: The surgical correction of mild-to-moderate and moderate MV regurgitation in patients with impaired LV function should be taken into consideration, yielding better survival and improved LV function.