

RISK FACTORS OF DECOMPENSATION OF HEART FAILURE IN PATIENTS UNDERGOING MITRAL VALVE REPLACEMENT

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Purpose of study:

To examine the impact of risk factors on the remodeling process and systolic function of the left ventricle (LV) in patients after mitral valve replacement (MVR)

Information and methods:

125 patients of 28-63 years were examined after MVR. 76 of them were women, 49 were men. The patients were divided into 4 groups. Group 1 comprised 31 patients with ischemic heart disease (IHD), where Group 2 included 29 patients without IHD. Group 3 comprised 33 patients with high blood pressure (av. blood pressure $-150,8 \pm 4,1$), Group comprised 32 patients with normal blood pressure (av. $-114,0 \pm 3,3$). Comparative analysis was performed between the patients of Groups 1, 2, 3 and 4.

Results:

In Group 1, there had been an increase in the size of LV in: end diastolic volume (EDV) - 19,5%, end systolic volume (ESV) - 13,4%, myocardial stress in systole (MSs) - 23,3% and in diastole (MSd) - 21,5%, indexed myocardial mass (IMM)-17,4%, lowering of ejection fraction (EF) up to 6,5%, in comparison with Group 2. In Group 3, there had been an increase in LV in: ESV - 24,9%, EDV - 19,5%, MSd - 30,2%, MSs - 31,3 %, IMM - 19,8%, lowering of EF in 12%, as opposed to Group 4.

Therefore, in patients undergoing mitral valve replacement, the presence of ischemic heart disease and hypertension contribute to the increase of hemodynamic load on myocardium, influencing the remodeling processes and systolic function of LV.