
RESULTS OF OFF-PUMP MYOCARDIAL REVASCULARIZATION IN PATIENTS WITH LV EJECTION FRACTION <45%

SHARIPOV I.M., YARBEKOV R.R., ISMATOV A.A., MURADOV M.M., OMONOV S.KH., VAKHIDOV T.Z.

Republican specialized center of cardiology (Tashkent. Uzbekistan)

Conventional on-pump coronary artery bypass grafting operations in patients with compromised left ventricular (LV) systolic function are accompanied by high rates of morbidity and mortality. The wide spread in the last two decades of off-pump myocardial revascularization techniques in patients with low surgical risk showed the safety of such operations. In this regard, the question of the possibility and results of such operations in patients with high risk, in particular, with low contractility of the LV, is especially actual.

Aim – to study the results of off-pump myocardial revascularization operations in patients with LV ejection fraction (LVEF) less than 45%.

Material and methods. A comparative analysis of the results of surgical treatment of 450 patients with ischemic heart disease, to whom off-pump myocardial revascularization operations were performed, was done. All patients were divided into two groups: Group I – 91 (20,2%) patients with LVEF less than 45%, and II Group-359 (79,8%) patients whose LVEF was more than 45%. Patients of both groups were comparable by sex, age and basic clinical-functional parameters. The majority of patients were male – 85,7% (78 patients) and 83,0% (298 patients) respectively in the I and II groups. The average age of patients in the I group was $60,6 \pm 7,1$ years, and in group II- $58,57 \pm 7,8$ years. In the first group there were more patients in

the acute stage of myocardial infarction – in I group 23,1% (21 patients), and in II Group – in 16,7% (60 patients), although the difference was statistically nonsignificant ($p=0,426$). The risk of surgery calculated by EuroScore calculator amounted in the I group $6,66 \pm 6,9\%$, and in group II – $3,39 \pm 2,9\%$ ($p=0,005$).

Results and discussion. In the first group, the average number of grafts was $3,02 \pm 0,68$ per patient, and in group II – $3,13 \pm 0,7$ grafts. The duration of the operation in both groups was $221 \pm 5,6$ and $248 \pm 5,46$ min respectively. Inotropic support intraoperatively and in the immediate postoperative period was necessary in I group in 59.3% (54 patients), and in II group-in 33,1% (119 patients) ($p=0,03$). The average time of ventilation in the ICU was in the first group $6,05 \pm 3,6$ hours, in the II group – $5,72 \pm 3,3$ hours. The ICU stay was averaged $53,5 \pm 2,5$ hours in group I and $40,08 \pm 1,5$ hours in group II ($p=0,07$). In the first group hospital mortality amounted to 1,1% (1 patient) – at expected 6.66%, and in II Group – 0,8% (3 patients) – at expected 3,39%.

Conclusions. Off-pump coronary artery bypass grafting operations in patients with LV systolic dysfunction are safe and can be performed with low levels of complications and hospital mortality without interfering the completeness of revascularization.

RESULTS OF OFF-PUMP MYOCARDIAL REVASCULARIZATION IN HIGH-RISK PATIENTS WITH EUROSCORE ≥ 5

SHARIPOV I.M., YARBEKOV R.R., ISMATOV A.A., MURADOV M.M., OMONOV S.KH., VAKHIDOV T.Z.

Republican specialized center of cardiology (Tashkent. Uzbekistan)

Background. With the wide spread in the last two decades of the technology of performing myocardial revascularization off-pump, acquires a great scientific and practical significance a question of expanding indications to these operations on patients of high surgical risk group.

Aim. To carry out comparative analysis of results of off-pump coronary artery bypass grafting surgery in patients with high and low surgical risks.

Material and methods. The comparative analysis of results of surgical treatment of 450 patients with ischemic heart disease, to whom was performed off-pump myocardial revascularization surgery, was carried

out. Depending on the meaning of EuroSCORE risk-calculator, all patients were divided into two groups – I group – 188 (41,8%) patients of high surgical risk with EuroScore ≥ 5 , and group II – 262 (58,2%) low-risk patients (Euroscore <5). In the first group there were significantly more female patients – (23,1% versus 11,1%), aged patients (average age 63,9 years versus 57,8 years in II Group), with ACS (34,1% versus 5,6%), persons with LVEF less than 45% (30,8% versus 12,8% in group II). Surgical risk by EuroScore calculator was in group I – $7,3 \pm 4,4\%$ ($6,5 \pm 1,5$ points), and in group II – $1,9 \pm 0,7\%$ ($2,4 \pm 1,3$ points), the difference was statistically significant ($p<0,001$).