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Hybrid Approach to Myocardial Revascularization: Early Results of Randomized Trial

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Background:

The single-center randomized trial HREVS has started at our clinic in April 2012 (http://www.clinicaltrials.gov/ct2/show/NCT01699048).

Method and Results:

The trial design included 150 patients, who are divided in 3 groups of 50 people.
Group I - the group of hybrid myocardial revascularization, where the first stage is MIDCAB and the second stage is PCI of the remained lesions of coronary arteries.
Group II - the group of the conventional CABG.
Group III - the group of endovascular revascularization only, with the same 2nd generation clinically proven DES.
Criteria of inclusion in our trial are multi-vessel lesions of CA with equal ability to perform all three comparing methods of a revascularization. Randomization is carried out by the blind method ("envelopes"). In hospital time, 24 months and 60 months after primary myocardial revascularization were planned control points of the trial. As final points of the trial accepted death, MACCE, a repeated revascularization. 45 people are included in research at this moment. 10, 14 and 21 patients were randomized to the group I, group II and group III. Clinical characteristics of patients in all groups did not differ significantly.
As a first stage in the group I the MIDCAB was performed. Good patency of the grafts was confirmed with flowmetry at the OR, and then at the cath lab. As a second stage the PCI were performed from 1 to 3 days after surgery with good patency of CA in all cases. In the group II CABG were successfully performed in all cases. There are no unsuccessfully or incompletely PCI's in the group III.
There was no mortality and any MACCE, repeated revascularization at inhospital time of our trial.

Conclusion:

The hybrid approach at inhospital point RCT HREVS showed the good results comparable to results of traditional approaches to myocardial revascularization.