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Myocardial remodeling in NSTEMI patients with intermediate and low cardiovascular risk exposed to delayed revascularization

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Abstract

Background: Nowadays, the impact of the delayed myocardial revascularization (DMR) (>72h) in patients with myocardium infarction without ST-segment elevation (NSTEMI) having either intermediate or low cardiovascular risk (ILCR) on quality of post-infarction myocardial remodeling is not well established. Aim of the study: The comparative evaluation of cardiac functional recovery of NSTEMI patients undergoing either revascularization <72h or DMR (72h–30 days) in a follow-up of 6 months.
Material and methods: The study was realized in 2 homogenic series of NSTEMI patients with ILCR exposed to revascularization: <72h (control) or to DMR (72h–30 days). The echocardiographic and physical test indices were registered at the 2nd day since revascularization and after 6 months.
Results: The increasing ratio of ejection fraction was significantly higher in patients with DMR compared to control (5.24% vs 1.73%). Likewise, the contractility ability of left ventricle improved better, proven by systolic volume diminution, lower value of akinetic areas, and less patients with class III of heart failure according to New York Heart Association (4 vs 29%). More than that, DMR was associated with higher physical endurance.
Conclusions: NSTEMI patients with ILCR exposed to delayed myocardial revascularization (72h–30 days) had a better post-infarction recovery after 6 months according to dynamics of echocardiographic and physical tolerance indices in comparison with patients revascularized <72h.
Key words: myocardial infarction, delayed revascularization, myocardial remodeling, echocardiographic indices.

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