Adherence to statin therapy and impact on short and long-term outcomes in patients after myocardial infarction

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Introduction: Statin use in secondary prevention after acute coronary syndrome (ACS) is one of the most researched areas in cardiology[1]. The aim of this study was to determine the association between adherence to statin therapy and major adverse cardiovascular events in patients after a myocardial infarction.

Patients and Methods: The examined group consisted of 421 patients who were treated for ACS- percutaneous coronary intervention (PCI) or coronary artery bypass graft (CABG) from 2019 to 2020 at the Dubrava University Hospital, Zagreb. We have collected basic demographic, clinical and laboratory data available in digital medical documentation. Adherence to the drug therapy was measured by Morisky Medical Adherence scale during telephone monitoring. It was primarily analyzed association between adherence to recommended statin therapy and occurrence of major adverse cardiovascular events (MACE), and secondarily the association of other demographic and clinical features with MACE.

Results: Adherence to therapy after discharge was measured successfully in 371 (88%) patients. Most of them had moderately high adherence. Of the recommended drugs at discharge, the drug that respondents indicated as the one they most often forget to take, do not take regularly as prescribed was statin. Even 11% of patients did not take any dose of statin and 189 patients (51%) took the statin as recommended. A total of 93 (22%) patients experienced a composite MACE. Patients with low adherence to statin therapy had the highest proportion of MACE (26%) compared to the other two groups. Relative risk for experiencing MACE in patients who did not reach value of low-density lipoprotein cholesterol (LDL) <1,8 mmol/L at 12 months follow-up was 1.25 (25% higher relative risk, p=0.248) and was not statistically significant. On the other hand, the relative risk for experiencing MACE in patients who did not reach the target LDL-cholesterol value of less than 2.6 mmol/L after 12 months was 1.68 (68% higher relative risk, p=0.008) and was statistically significant.

Conclusion: Our study aimed to show that regular statin therapy intake is as much important as achieving target LDL values in reducing MACE.

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LITERATURE

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