Fibrate/Statin Treatment Following an Acute Coronary Syndrome

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Background: The effect of combination of fibrate with statin on major adverse cardiovascular events (MACE) following acute coronary syndrome (ACS) hospitalization is unclear. The main aim of this study was to investigate the 30-day rate of MACE in patients participated in the nationwide ACS Israeli Surveys (ACSIS) treated on discharge with a fibrate (mainly bezafibrate) and statin combination vs. statin alone.

Methods: The study population comprised 8982 patients from the ACSIS 2000, 2002, 2004, 2006, 2008 and 2010 enrollment waves who were alive on discharge and received statin. Of these, 8545 (95%) received statin alone and 437 (5%) received fibrate/statin combination. MACE was defined as a composite measure of death, recurrent MI, recurrent ischemia, stent thrombosis, ischemic stroke and urgent revascularization.

Results: Patients from the combination group were younger $(58.1\pm11.9 \text{ vs. } 62.9\pm12.6 \text{ years})$. However, they had significantly more co-morbidities (hypertension, diabetes, current smokers) and unfavorable cardio-metabolic profile (with respect to glucose, total cholesterol, triglyceride and HDL-cholesterol). Development of MACE was recorded in 513 (6.0%) patients from the statin monotherapy group vs. 13 (3.2%) from the combination group, p = 0.01. 30-day rehospitalization rate was significantly lower in the combination group: 68 (15.6%) vs. 1691 (19.8%) of patients, respectively; p = 0.03. Multivariable analysis identified the fibrate/statin combination as an independent predictor of reduced risk of MACE with odds ratio of 0.54, 95% confidence interval 0.32-0.94.

Conclusion: A significantly lower risk of 30-day MACE rate was observed in patients receiving combined fibrate/statin treatment following ACS compared with statin monotherapy.