

Lopina N.A.

Method of residual vascular risk correction in patients with ischemic heart disease and type 2 diabetes mellitus

Kharkov National Medical University, Internal Medicine Department № 3,
Kharkov, Ukraine

Purposes: to investigate the effects of combination therapy with fenofibrate and α -lipoic acid (ALA) on dyslipidemia in patients with ischemic heart disease (IHD) and type 2 diabetes mellitus (T2DM).

Methods. 40 patients with IHD (average duration 7.2 ± 2.3 yrs) and T2DM (4.7 ± 1.5 yrs) were divided into 2 groups: the 1st (n = 30) – patients with IHD and T2DM, 15 of them received the standard therapy, 15 - in the standard therapy received combination of fenofibrate 145 mg once daily with ALA 600 mg once daily, the 2nd (n=10) – patients with IHD without T2DM - received the standard therapy. The level of HbA1c was less than 7.5%. The control group included 10 healthy persons. In all patients were determined the levels of total cholesterol (TCH), low-density lipoprotein cholesterol (LDL), triglycerides (TG), high-density lipoprotein cholesterol (HDL) by enzymatic colorimetric method at baseline and in 2 months.

Results. The study found that among 1st group of patients dominated the combined dyslipidemia with significant increase in levels of TCH, LDL, TG and lowering HDL level, while in the 2nd group registered increased levels of TCH and LDL ($p < 0,05$). In the 1st group it was established correlation between the level of LDL cholesterol and HbA1c ($r = 0.31$, $P = 0.043$). In 2 months in all patients were seen lowering of LDL by 12.2% and 13%, TG by 7 and 16% in the 1st and 2nd groups respectively ($p < 0,05$) and significant increase of HDL levels by 14% ($P = 0.022$) in the 2nd group. As compared with baseline, combination therapy with fenofibrate and ALA substantially increased plasma levels of HDL on 12% (0.13 mmol/L), decreased TCH, LDL and TG levels on 7%, 9% and 12% respectively (all $p < 0.001$).

Conclusions. Combination therapy with fenofibrate and α -lipoic acid significantly reduced total cholesterol, LDL, TG, increased HDL and as a result reduced residual vascular risk in patients with IHD and T2DM.