Abstract:
The aim of this study was to evaluate levels of lipid and extralipid parameters in patients with atherogenic dyslipidemia. We investigated the lipid-lowering therapeutic efficacy of fenofibrate and its extralipid influence on oxidized low-density lipoprotein (oxLDL), C-reactive protein (CRP), Fibrinogen, factor VII and plasminogen activator type 1 (PAI-1) during 1-month treatment. Fourteen individuals with HLPHb were treated with micronised fenofibrate (267 mg/d) for 1 month. The control group included twelve volunteers. Lipidograms were determined with enzymatic kits. ELISA method was used to measure oxLDL and PAI-1. Plasma CRP levels were measured spectrophotometrically. Fibrinogen and factor VII serum levels were evaluated with automatic coagulometer. After 1-month therapy with micronised fenofibrate, we observed a significant reduction of total cholesterol (TC) (277.2 to 217.8 mg/dL, p < 0.05), LDL (183.6 to 129.4 mg/dL, p < 0.05), triglyceride (TG) (316.7 to 220.6 mg/dL, p < 0.05), oxLDL (68.7 ± 5.5 to 39.7 ± 3.7 U/L, p < 0.001) and increase in high-density lipoprotein (HDL) (35.1 to 41.9 mg/dL, p < 0.05). Fibrinate treatment also decreased CRP (5.81 ± 0.26 to 5.08 ± 0.06 mg/L, p < 0.001), PAI-1 (120.4 ± 9.7 to 84.7 ± 5.9 mg/mL; p < 0.05), fibrinogen (3.65 ± 0.17 to 3.44 ± 0.16 g/L, ns) and factor VII (1.59 ± 0.17 to 1.57 ± 0.17; ns). The micronized fenofibrate at a daily dose of 267 mg demonstrated a highly beneficial effect on all lipid parameters and disadvantageous influence on inflammatory and thrombogenic plasma risk factors in patients atherogenic dyslipidemia.

Key words:
hyperlipoproteinemia, fenofibrate, oxLDL, CRP, PAI-1