MILOS ZARKOVIC: THERAPY OF THE METABOLIC SYNDROME

Abstract:

Therapy of the metabolic syndrome consists of reduction in body weight, blood pressure and dyslipidemia control, insulin resistance therapy and diabetes type 2 prevention. Physical activity is a necessary part of the treatment. Reduction of body weight depends on the energy intake, but not the food composition. In the treatment of obesity orlistat, sibutramine and rimonabant are used. During the long-term therapy, average weight loss was 2.9 kg with orlistat, 4.2 with sibutramine and 4.7 kg with rimonabant. The goal of the blood pressure therapy is 130/80 mgHg. First-line drugs are ACE inhibitors angiotenzine receptor blockers, while second-line drugs are calcium channel blockers and beta-blockers with vazodilatatory activity (carvedilol and nebivolol). Other beta-blockers and thiazide diuretics should be avoided, because of the insulin resistance induction and the increase in the risk of developing diabetes. The main goal of dyslipidemia therapy is to reduce LDL cholesterol. Statins are the drugs of choice, while fibrates are less significant. Niacin is very effective, but it is associated with deterioration in glycoregulation. Omega-3 fatty acids reduce hepatic secretion of triglycerides rich lipoproteins. Metformin and tiazolidindione are effective in preventing diabetes, but less than the lifestyle change. Aerobic physical activity significantly improves the insulin sensitivity, and physically active subjects have a lower cardiovascular mortality than people who are not.

Key words: Metabolic syndrome, obesity, arterial hypertension, dyslipidemia, therapy