

# EFFECTS OF STATINS ON LIPID AND CARBOHYDRATE METABOLISM IN PATIENT WITH TYPE 2 DIABETES AND CARDIOVASCULAR DISEASES.

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## Objectives:

Patients with diabetes mellitus (DM) type 2 is a group of high cardiovascular risk. The incidence of coronary heart disease in their 2-4 times higher than in the population without diabetes, 80% of cases of diabetes combined with hypertension. At the same time any change in lipid metabolism leads to increased cardiovascular risk in patients with type 2 diabetes. Statins is first-line drugs in patients with dyslipidemia.

## Methods:

The study involved 15 patients with type 2 diabetes and dyslipidemia in mean age  $59,8 \pm 1,03$  years, among them, 11 women and 4 male. All patients was prescribed statins in mean dose 4 mg per day for 3 month. During the study were determined the levels of glycated hemoglobin (HbA1c) and lipid status before and after treatment.

	Total cholesterol	Triglycerides	Low-density lipoprotein	Very low density lipoproteins	High-density lipoprotein	HbA1c , %
Before treatment (n=15)	$5,64 \pm 0,2$	$1,77 \pm 0,2$	$3,73 \pm 0,2$	$0,51 \pm 0,05$	$1,49 \pm 0,08$	$7,39 \pm 0,4$
After treatment (n=15)	$4,38 \pm 0,2$ *	$1,65 \pm 0,2$	$2,53 \pm 0,2$ *	$0,51 \pm 0,06$	$1,48 \pm 0,08$	$7,54 \pm 0,3$

## Results:

Analyzing the results obtained in the groups of patients a significant decrease in levels of total cholesterol, low-density lipoprotein. Triglyceride levels decreased to normal range after 3 months. Statistically significant increase in glycated hemoglobin was not confirmed.

## Conclusions:

Application of statin leads to the likely reduction in levels of total cholesterol, low density lipoprotein, indicating that effective treatment of dyslipidaemia in patients with type 2 diabetes. Statistically significant effect on glycated hemoglobin was not observed.

