METABOLIC STATUS IN PATIENTS WITH TYPE 1 DIABETES MELLITUS

Poster Number EP-451

E. Vashchenko

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The republican Research Centre for Radiation Medicine and Human Ecology, Gomel, Belarus

Purpose of this research was analyse the relationship of compencation, lipid profile parameters and androgenic status in patients with type 1 (DM-1) depending on the duration of diabetes.

Methods:

There were examined 76 men with DM-1 aged 20 to 49 years (mean age 35,8±8,2) and duration of diabetes more than a year. The control group consisted of 25 healthy men aged 21 to 41 years (mean age 34,6 ± 7,8). Compensation of diabetes was assessed by the level of glycohemoglobin (HbA1C). Also there were assessed the lipid profile parameters (total amount of cholesterol, triglycerides), total testosterone, FSH, LH, prolactin hormone, sex hormone binding globulin, homocysteine.

Results:

It has been determined that at the absence of compensation in patients with DM-1 (HbA1c 8,3 ± 1,4%), with the increasing duration of diabetes there was noticed the increasing of body mass index: a group with DM<10 years, 24,6 ± 3,9 kg / m2, the group with DM> 10 years, 27,6 ± 4,4kg / m2 (p = 0.01), progression of lipid storage disease (increased level of triglycerides: 1,4 ± 1,1mmol / L versus 3,7 ± 1,3 mmol / L in the group with DM >10 years (p = 0.01)). We were not found the difference in levels of total cholesterol, LH, FSH, prolactin hormone, sex hormone binding globulin, homocysteine. The absence of androgenic status disorders and changes of homocysteine level are probably associated with the young age of patients, a slight excess of weight and a lack of decrease in GFR.

Conclusions

The detected changes are important risk factors of development and progression, and require appropriate arrangements, including the correction of body weight and secondary dyslipidemia.





