in plasma using standard clinical methods. Establishment of MS diagnosis was based on the presence of central obesity, defined as waist circumference more than 102/88 cm for men/women plus any two of the following four factors: raised triglycerides ≥150 mg/dl (1,7 mmol/l), reduced HDL cholesterol <40 mg/dL (1,0 mmol/l) for men and < 50 mg/dL (1,3 mmol/l) for women, raised blood pressure ≥ 130/85 mmHg, raised fasting hyperglycemia >110 mg/dl (6,0 mmol/l) or previously diagnosed type 2 diabetes.

Results. According to the obtained data, the level of triglycerides exceeded 150 mg/dl (1,7 mmol/l) even in patients with DM duration less than 5 years (186,1±29,92 mg/dl), being significantly increased in case of DM duration 5-10 years (247,4±46,18 mg/dl), but decreased in DM duration more than 10 years (192,6±30,73 mg/dl).

Normal body weight was observed only in 8% of examined patients, whereas in 40% of them overweight was diagnosed, in 34% – obesity of I degree, in 13% – II degree, in 5% – III degree correspondingly, accompanied by abdominal obesity. Being normal (132,9±30,30 mg/dl) in patients with normal body weight, HTG was steadily elevated according to the increase of BMI and waist circumference (208,5±29,02 mg/dl in overweight patients, 231,5±53,61 mg/dl, 242,1±42,45 mg/dl and 261,6±27,30 mg/dl in patients with obesity of I, II and III degree correspondingly), accompanied by high fasting hypeglycemia. These results are indicative of a considerable risk to develop insulin resistance and metabolic disturbances in the examined patients.

Conclusion. Abnormal triglycerides level is associated with markers of MS in patients with poorly controlled diabetes and strongly indicate existing metabolic risk of CVD in patients with type 2 diabetics with insulin resistance.

UDK : 616.61 + 616.379 – 0.08.64].092: 612.015.14

M.S. Akentieva, Prajanka Prasad

FEATURES LIPID SPECTRUM OF BLOOD IN PATIENTS WITH DIABETIC NEPHROPATHY III-IV DEGREE

Department of internal medicine
(scientific adviser — PhD L.O. Zub)
Bukovinian State Medical University, Ukraine

Today it is known that diabetes mellitus (diabetes) causes a significant imbalance of lipid fractions in the study of lipid spectrum of blood. In patients with renal glomerular pathology also recorded changes of lipidohramy, the survey of imbalances lipids in diabetic nephropathy (DN).

The aim of the study was blood lipid spectrum in patients with DN III-IV degree.

The study involved 19 patients at DN III-IV degree, had diabetes type II. The average age of patients was 42.5 + 5.2 years. Patients were divided into 2 groups: group I - DN degree III (10 persons), group II - DN IV degree (9 persons). The results showed lipidohram likely increase low-density lipoprotein content ($p<0.05$), lipoproteins very low-density ($p <0.05$) decrease in the content and likely high-density lipoprotein ($p <0.05$) in patients I and II groups. In group II patients experienced probable increase in triglyceride content in blood ($P <0.05$).

So, given the more pronounced changes in lipid levels in patients with DN IV degree, we can judge the negative prognosis of the disease in patients of II group. This is due to the fact that a pronounced imbalance of lipids causes profound structural changes in the vascular wall, resulting in significantly worse microcirculation, including in the capillaries of renal glomeruli, which accelerates the onset of kidney failure.

UDK: 613.288

N. Andriychuk, A. Vlasyk, Y. Halvawala

HYGIENIC CHARACTERISTICS OF SIMPLE CARBOHYDRATES IN FOOD RATIONS AT CHILDREN EDUCATIONAL ESTABLISHMENTS OF CHERNIVTSI

Department of hygiene and ecology
(scinetific adviser - prof. L.I.Vlasyk)
Bukovinian State Medical University, Chernivtsi, Ukraine

Nutrition is an essential component that ensures the full processes of growth and development. Intensive production of refined food promotes the consumption of highly purified dietary fiber bread, cereals, sweets. Unbalanced energy value and the qualitative composition of food contains excess of simple carbohydrates, which are risk factors of hyper-cellularity forms like obesity, insulin independent diabetes, diseases of cardiovascular system & gastrointestinal tract.

The study carried out was Hygienic evaluation of simple carbohydrates content in food rations of children attending Children Educational Establishments in Chernivtsi.

Study of children's organized diet was performed in 9 Children Educational Establishments by calculation method, obtaining a copy of data of menu layout for 10 days according to seasons. Simple carbohydrates Research content (mono and disaccharides) was carried out using electronic programs, compiled on the basis of tables suggested by 'I.M.Skuryhina' and followed by assessment of their compliance with «Standards of the physiological needs of the population of Ukraine in major nutrients and energy» (1999) and

«Standards of physiological requirements for energy and nutrients for different groups of the Russian Federation» (2008)