Insulin resistance, the central abnormality for the pathogenesis of metabolic syndrome, is considered an independent risk factor for cardiovascular mortality in general and in the diabetic population in particular. Metformin exerts an antihyperglycemic effect, with minimal risk of hypoglycemia, and has been recently used to prevent type 2 diabetes with a 31% reduction in incidence.

Khrebtiy G.I.

L-ARGININE CHLORIDE AND ENDOTHELIAL DYSFUNCTION

Department of Internal Medicine, Physical Rehabilitation, Sports Medicine and Physical Training
Higher State Educational Institution of Ukraine
«Bukovinian State Medical University»

Nowadays hypertonic disease (HD) is considered as an endothelium dysfunction condition, accompanied by constriction of vascular smooth muscles which is related with insulin resistance development (IR). The accumulated experimental, epidemiological and clinical researches, showed the increase of insulin level in patients with HD, indicating that IR is an important pathogenic factor of HD.

All the patients with HD of stage II received basic therapy of lisinopril, amlodipine and atorvastatin as control group .Then we took 30 people of the group and gave them besides the basic therapy an infusion of 100 ml of 4,2% solution of L-arginine chloride over the period of 12-14 days as inpatienst and then as outpatients orally 20 ml of 4 grams twice a day 40 minutes before the meal, for the duration of 3 months.

After 3 months , in patients with basic therapy plus L-arginine the improvement of endothelium dependent vasodilation (EDV) was 97,9 % and endothelium not dependent vasodilation hypertonic disease (ENDV) was 0% and the speed of blood flow in the brachial artery V in dynamics with reactive hyperemia test was (V-RHT) 17,1 % compared to improvement only of (EDV) 63,1%, (ENDV) 2,2 %, (V-RHT) 6,2 % in the group with basic therapy.

Combination of antihypertensive and hypolipidemic therapy and gradual including of L-arginine by intravenous-oral way showed significant improvement of endothelium dependent vasodilatation, compared with control group in hypertonic patients with concomitant insulin resistance.

Kokhaniuk Iu.V., Fediv A.I.

FIBRINOLYTIC ACTIVITY FEATURES OF BLOOD PLASMA AND MORPHOFUNCTIONAL STATE OF ERYTHROCYTES INFLUENCED BY PEPSANE AND QUERCETIN IN PATIENTS WITH EROSIVE FORM OF GASTROESOPHAGEAL REFLUX DISEASE AGAINST DIABETES MELLITUS TYPE 2

Department of internal medicine and infectious diseases
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»

Gastroesophageal reflux disease (GERD) is a global problem today due to the features of its course and treatment.

The aim of our study is to evaluate the efficiency of drugs "Pepsane" and "Quercetin" while adding them to a standard treatment regimen for the erosive form of GERD (EGERD) in patients with concomitant diabetes mellitus (DM) type 2.

The study involved 29 patients with EGERD, combined with DM type 2, from 40 to 74 years old and 20 practically healthy individuals (PHI), who were divided into the following groups: group 1 was represented by 7 patients with EGERD who were administered basic therapy; group 2 included 13 patients with EGERD who took Pepsane alongside with the basic therapy; group 3 included 9 patients with EGERD who were administered "Pepsane" and "Quercetin" within 28 days as an addition to the standard treatment. The patients from PHI made up the fourth (reference) group. Fibrinolysis system in the blood plasma was studied by N.Tits techniques. The relative viscosity of erythrocyte suspension (RVES) and index of erythrocyte deformability (IED) were determined by Z.D. Fiodorova and M.O. Kotovshchykova techniques.

It has been established that exposure to basic treatment and "Pepsane" and to standard treatment combined with taking "Pepsane" and "Quercetin" leads to a significant correction process of fibrinolysis, which manifested itself with a potential decrease ($p<0,05$). And the patients who only received a basic therapy had better fibrinolysis indicators too, but these changes were less significant compared to the group who used combination therapy ($p>0,05$), with an obvious inter-group difference ($p<0,05$).

Comprehensive treatment with "Pepsane" and "Quercetin" was likely to contribute to a higher degree of increase (by 22,0% ($p<0,05$) in group 3) and normalization of IED value compared to that before the treatment, a significant decrease of RVES (by 16,4% $p<0,05$) in the dynamics of treatment in contrast to the first one, where IED increased by 10,8% ($p>0,05$), and RVES decreased by 12,1% ($p<0,05$) obviously differing from those which were before the treatment.

Thus, the addition of "Pepsane" and "Quercetin" to a standard treatment in patients with EGERD, combined with DM type 2, helps to achieve more effective results, and may be recommended for using in clinical practice.