МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

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Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2023 році №5500074

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The aim of the study. To investigate the relationship between the peculiarity of the course of combined hypertension and OA and the concentration of ghrelin and melatonin in patients with these diseases.

Material and methods. According to the research program, 60 people in total of different ages and sexes, patients with hypertension and OA, were examined. The control group consisted of 10 practically healthy people.

Determination of the concentration of ghrelin in the blood serum of patients was carried out using the Human GHRL(grelin) ELISA Kit (Elabscience, the USA) immunoenzymatic method according to the instructions using a multichannel microspectrophotometer AutoPlex ELISA & CLIA Anayzer (92980) (Monobild, the USA).

The concentration of melatonin in the blood serum of patients was determined using a set of Melatonin ELISA reagents (IBL International, Germany) by immunoenzymatic method according to the instructions using a multichannel microspectrophotometer AutoPlex ELISA & CLIA Anayzer (92980) (Monobild, the USA)

The obtained data were processed by the methods of variational statistics using the Statistica 12.0 program.

Results. In accordance with the study plan, the levels of melatonin and ghrelin in fasting blood serum were determined in patients with combined pathology. Thus, in the subjects examined in the group with combined pathology, the average indicators of ghrelin levels were 1,7 times (2,69±0,12 ng/ml) lower than the similar indicator in the control group (4,64±0,05 ng/ml, $p < 0,05$), and melatonin – 2,6 times (46,71±6,26 pg/ml) compared to the same indicator in the control group (125,43±8,13 pg/ml, $p < 0,05$). The low levels of the investigated indicators in patients with combined hypertension and OA confirm our interest in them as markers for early diagnosis of the course and progression of these comorbid diseases. It should be noted that a direct correlation ($r = +0,59$, $p < 0,05$) of medium strength was established between the levels of melatonin and ghrelin in the studied patients with hypertension combined with OA. This relationship additionally confirms the importance of the above-mentioned indicators in the pathogenesis and course of combined hypertension and OA and requires further study. Considering all of the above, we consider it expedient to find out the relationship between the levels of ghrelin, melatonin and blood pressure indicators in patients with combined pathology. In the course of the study, it was established that in the group of patients with combined hypertension and OA, there was an inverse correlation ($r = –0,31$, $p < 0,05$) between indicators of average daily SBP and ghrelin concentration. An inverse correlation was also established between melatonin serum concentration indicators and average daily SBP data ($r = –0,49$, $p < 0,05$).

Conclusions. Indicators of ghrelin and melatonin concentrations can be recommended as "early" reliable prognostic markers of the development and progression of the mentioned comorbid pathologies.

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GUANINE NUCLEOTIDE-BINDING PROTEIN BETA-3 (GNB3, RS5443) AND ENDOTHELIAL NITRIC OXIDE SYNTHASE (NOS3, RS2070744) GENES POLYMORPHISM AS MARKERS OF OBESITY IN HYPERTENSIVE PATIENTS

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Introduction. More than 50% of patients with essential arterial hypertension (EAH) have additional cardiovascular risk factors, among which the most common are obesity, diabetes mellitus, metabolic syndrome, etc.

The aim of the study was to investigate polymorphic variants of the endothelial nitric oxide synthase (NOS3, rs2070744) and guanine nucleotide-binding protein beta-3 (GNB3, rs5443) genes as markers of obesity in EAH patients.

Material and methods. One hundred patients with EAH and target-organ damaging (2nd stage), moderate, high or very high cardiovascular risk were involved in the case-control study.

Among them 79.0% (79) women and 21.0% (21) men. Their average age is 59.87±8.02; disease duration from 6 to 25 years. All participant underwent clinical and laboratory examinations. Obesity was determined by body mass index (BMI) ≥30 kg/m^2. GNB3 (rs5443) and NOS3 (rs2070744) genes genotyping performed by Real-Time PCR based method. Risks were studied by the clinical epidemiology method. All enrolled /examined patients signed the Informed Consent to participate in the study. Control group included 48 practically healthy individuals of relevant age.

Results. In EAH patients the mutation of the NOS3 gene in the homozygous state occurs with a frequency of 16.67%, and for the GNB3 gene – 8.33% of cases, which does not differ from the control group. The relative frequency of obese people prevailed among EAH patients with the mutational C-allele carriers of the NOS3 gene by 31.94% (χ^2=13.58; p<0.001) and in patients with mutational T-allele of the GNB3 gene (30.56%) in the absence of such among the healthy. The risk of obesity increases in EAH patients with the C-allele carriers of the NOS3 gene almost 6 times [OR 95%CI:2.11-14.82; p<0.001] and in T-allele patients of the GNB3 gene – more than 10 times [OR 95%CI:2.25-45.44; p<0.001]. The TT-genotype of the NOS3 gene and the CC-genotype of the GNB3 gene play a protective role against obesity.

Conclusions. Thus, the C-allele of the NOS3 gene (rs2070744) and the T-allele of the GNB3 gene (rs5443) increase the obesity risk in arterial hypertensive patients 6 and 10 times (p<0.001).

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SECONDARY IMMUNODEFICIENCY STATES – ACOMPLICATED "ADDITION" TO NUMEROUS DISEASES OF INTERNAL ORGANS

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Introduction. Progressive environmental degradation, an intense increase of the life tempo and associated with them long-term psycho-emotional stress, deterioration of the biological value of food, and drinking water quality contribute to the growth of population morbidity of the Earth's population and significantly weaken the human immune system under the influence of numerous exo- and endogenous factors. There is an unfortunate prospect of increasing the frequency and severity of immunodeficiency states (IDS) and their appearance in younger people. Often, IDS manifest themselves as an "addition" to any disease or group of diseases of different organs and systems in one individual. Diagnosis, especially the treatment tactics of IDS is quite complex, often delayed, controversial and constantly improving. One of the reasons for "delay" in diagnosis is the lack of awareness of young doctors of different profiles, especially therapeutic, about this problem.

The aim of the study. Our aim is to highlight the main aspects of the diagnosis, treatment and prevention of IDS and the experience of teaching this material in the educational process of interns-therapists.

Materials and methods. A large amount of scientific data in monographic, scientific databases, materials of own long-term clinical studies with using methods of comparison and generalization of information data and other printed and electronic publications.

Results. It is found that in the available domestic literature this problem is covered controversially, especially in the aspect of clinical immunology of infectious bacterial and viral diseases, diseases of the endocrine system, polypathology, chronic intoxication, tumor processes, obesity, atherosclerosis, age dependencies, etc. Even in the communities of authoritative clinical immunologists, views on these aspects of immunological disorders sometimes differ significantly. The existing classifications of IDS in the clinical aspect mainly correspond to practical medicine, but they are not generally accepted, for example in cardiology, rheumatology, pulmonology, etc. Thus, clinical immunology as a science is relatively young, and its interdisciplinary aspects are now being intensively studied, but these principles are not sufficiently delivered to a wide range of doctors. In particular, we have to deepen their knowledge of general immunology, classification (working, domestic, by I.M. Drannyk), paraclinical methods of diagnostics, features of complex clinic-laboratory-immunological diagnostics (basic principles) in the practice of a general