The displacement of the maximum fluorescence power indexes to the short-wavelength range, starting with the wavelength λ = 473 nm were detected in the examined patients, and the absolute parameters of indexes remained significantly lower. The significant difference in the spectral distribution of the fluorescence intensity peak values, that were found in various diseases, have their attention drawn. In particular, in acute appendicitis case, the maximum parameters were observed at the wavelength of λ = 472 nm, with perforated ulcers - at the wavelength of λ = 468 nm, with acute cholecystitis - λ = 470 nm.

Thus, the above mentioned shows that the intensity of fluorescence of venous blood plasma of in patients with acute surgical diseases of the abdominal cavity changes with the characteristic regularity depending on the type of pathology. Determination of this indicator parameters can be applied for the purpose of differential diagnosis.

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EDEMATOUS PANCREATITIS DEVELOPMENT RISK DEPENDING ON COMBINATIONS OF ALLELIC VARIANTS OF GENES CFTR (rs 113993960), PRSS1 (rs 111033565) AND IL-4 (rs 2243250)

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The aim of the research was to study the combined influence of genes CFTR (rs 113993960), PRSS1 (rs 111033565) and IL-4 (rs 2243250) polymorphisms from the point of view of edematous pancreatitis development risk.

Genetic studies have been performed for 123 patients with acute and chronic pancreatitis exacerbation, among whom were 23 (18,7%) women and 100 (81,3%) men. The control group included 40 practically healthy individuals who were not relatives of the patients, of corresponding sex and age. Molecular genetic studies, which included the determining of polymorphic variants of genes CFTR (rs 113993960), PRSS1 (rs 111033565) and IL-4 (rs 2243250), have been performed at the laboratory of the State institution «Reference centre of molecular diagnostics of the Ministry of Health of Ukraine» (Kyiv). The polymorphic variants of analysed genes CFTR (rs 113993960), PRSS1 (rs 111033565) and IL-4 (rs 2243250) have been studied with polymerase chain reaction (PCR) method. The genotypes distribution among the examined patients and healthy people for the selected genes has been determined.

The distribution of polymorphic variants of CFTR (rs 113993960), PRSS1 (rs 111033565) and IL-4 (rs 2243250) genotype combinations showed no statistically significant difference between the group of patients and the control one. 52,47% of patients were the owners of NN / GG / CC genotype combination. 38,61% of patients with pancreatitis had the unfavorable T-allele of gene IL-4 in their genotype combination (NN / GG / CT-, or NN / GG / TT). The remaining combinations of genes CFTR / PRSS1 / IL-4 genotypes were met in rare cases (1-3 people). The incidence of minor TT-genotype of gene IL-4 was 7,50% in control group and 8,91% – in patients. Gene CFTR (delF508) mutation in the heterozygous state occured in 4.69% of patients and 2,50% of the healthy. The analysis of polymorphic variants of genes CFTR (rs 113993960), PRSS1 (rs 111033565), IL-4 (rs 2243250) genotype combination, depending on the type and etiology of edematous pancreatitis, showed no statistically significant difference in the frequency of genotype combination between the patients with acute or chronic pancreatitis exacerbation, and of alcoholic or biliary origin. Most of the patients were the carriers of a combination of favorable genotypes (NN / GG / CC): with acute pancreatitis – 57,81%, with chronic pancreatitis exacerbation – 43,24%, with alcoholic pancreatitis – 56,25%, with biliary pancreatitis – 45,95%. 29,69% of patients with acute pancreatitis, and 37,5% with alcoholic pancreatitis had an unfavorable T-allele of gene IL-4 in the genotype combination (NN / GG / CT, NN / GG / TT), also this allele was detected in 54,05 % of patients with chronic pancreatitis exacerbation, and in 40,54% with biliary pancreatitis. Among the patients with pancreatitis who had unfavorable T-allele of gene IL-4 in their genotype combination (NN / GG / CT-, or NN / GG / TT), 29,69% were with acute pancreatitis, 37,5% – with alcoholic one; 54,05% – with chronic pancreatitis exacerbation, 40,54% – with biliary pancreatitis.

The epidemiological analysis showed that the analyzed genes PRSS1 (365G> A), IL-4 (C-590T) and CFTR (delF508) genotype combinations are not risk factors of acute edematous or chronic pancreatitis exacerbation, neither of alcoholic nor of biliary origin.

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MORPHOMETRIC CHANGES OF SCLERAL LAMINA CRIBROSA IN PATIENTS WITH DIABETIC OPTIC NEUROPATHY

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Lamina cribrosa morphology is ever changing in health and disease, and its changes might cause primary optic nerve damage and secondary damage due to decreasing of blood supplying and axoplasmic transport. Anatomical narrowing of the lamina cribrosa scleral canal may be a precondition of optic nerve and retina damage in diabetes mellitus (DM). There is no information in published literature about the morphometric changes of lamina cribrosa and its scleral canal in patients with diabetic optic neuropathy (DON) in vivo.

The objective was to study the morphometric changes of the lamina cribrosa and changes of its scleral canal in patients with DM depending on the type and stage of the diabetic optic neuropathy.