

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
ВИЩИЙ ДЕРЖАВНИЙ НАВЧАЛЬНИЙ ЗАКЛАД УКРАЇНИ
«БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»**



МАТЕРІАЛИ

101 – ї

підсумкової наукової конференції

професорсько-викладацького персоналу

Вищого державного навчального закладу України

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Загальна редакція: професор Бойчук Т.М., професор Іващук О.І.,
доцент Безрук В.В.

Наукові рецензенти:

професор Братенко М.К.
професор Булик Р.Є.
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професор Годованець О.І.

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The drainage device (strip and sorbent) is removed 2-3 days after surgery and a wound is applied to the wound. Seams are removed for 4-5 days in postoperative period.

Thus, the use of the developed drainage-sorption device made it possible to accelerate the healing of the postoperative wound, shorten the time of inpatient treatment, thereby improving the results of surgical treatment of patients with hyperthyroid goiter.

Ivashchuk S.I.

**TRANSFERASES LEVEL AS A RISK FACTOR OF THE EDEMATOUS PANCREATITIS
DEVELOPMENT FROM THE POSITION OF THE GENE *IL-4* (RS 2243250)
POLYMORPHISM**

*Department of Family Medicine
Higher state educational establishment of Ukraine
«Bukovinian State Medical University»*

The aim of the research was to investigate the risk of acute edematous pancreatitis developing according to the transferase's level from the position of the gene *IL-4* (rs 2243250) polymorphism.

Genetic studies have been performed for 123 patients with acute and chronic pancreatitis exacerbation, among whom there were 23 (18.7%) women and 100 (81.3%) men. The control group included 40 practically healthy persons who were not relatives of the patients, of the corresponding sex and age. Molecular genetic studies, which included the determining of polymorphic variants of gene *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 gene *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 gene has been determined.

Increasing of the aminotransferases concentration in blood serum is an evidence of hepatocyte cytolysis and a confirmation of the important pathogenetic role of disintegration processes that take place in the hepatobiliary system, and of the development of an active inflammatory process in pancreas.

Increases in alanine aminotransferase (ALT) and aspartate aminotransferase (AST) levels were found in 32.67% (n=33) and 65.35% (n=66) patients with edematous pancreatitis. Among patients with "unfavorable" *T*-allele of the *IL-4* gene there were ones, relatively more likely to encounter subjects with higher activity rates of AST and ALT enzymes than among subjects with *CC*-genotype to 27.94% ($\chi^2=8.52$, $p=0.003$) and 24.33% ($\chi^2=22.08$, $p<0.0001$), respectively.

However, correlation analysis ($Sp=0.07$; $\phi=0.092$), as well as methods of clinical epidemiology ($RR=0.325$; $95\%CI: 0.381-1.361$) revealed no association between ALT level in peripheral blood and *C-590T* polymorphism of the *IL-4* gene. Between the AST content and edematous pancreatitis development in the carriers of the *T*-allele of the *IL-4* gene there is a weak positive relationship ($Sp=0.11$; $\phi=0.107$), which has not been confirmed as a risk factor for the acute pancreatitis appearance in the examined population ($RR=1.412$; $95\%CI: 0.805-2.474$).

An increase of the gamma-glutamyltranspeptidase (GGTP) concentration indicates the presence of intrahepatic cholestasis, as well as, indirectly, the activity of the inflammatory process, including those in the pancreas. An increase of GGTP concentration was found in 79.21% (n=80) patients with acute pancreatitis. The frequency of excess of the analyzed cholestasis rate between the genotypes of the *IL-4* gene did not differ significantly ($p>0.05$). However, serum GGTP levels were significantly higher in *TT*-genotype owners than in those with the *C*-allele ($p<0.05$).

The correlation analysis revealed a weak, unlike link between the GGTP concentration in the blood and the presence of a mutation in the 590 position of the *IL-4* gene promoter ($Sp=0.07$; $\phi=0.170$). In terms of odds and risk ratios, the increase in GGTP concentration is associated with the *C*-allele of the *C-590T* polymorphism of the *IL-4* gene ($RR=0.581$), however, the determination of 95% confidence intervals did not statistically confirm this assumption ($95\%CI: 0.333-1.014$).



Thus, the high level of serum aminotransferases is not a risk factor for acute pancreatitis development in the examined population from the position of the gene *IL-4* (rs 2243250) polymorphism.

Karliychuk M.A.

TOMOGRAPHY PECULIARITIES OF RETINAL STRUCTURAL CHANGES IN PATIENTS WITH TYPE II DIABETIC MELLITUS DEPENDING ON THE SCLERAL LAMINA CRIBROSA THICKNESS

*B.L. Radzikhovskiy Department of Ophthalmology
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»*

Diabetes mellitus (DM) is a global medical and social issue caused not only by its widespread prevalence but also by the development of severe multisystem complications. Optic nerve damage with diabetes (diabetic optic neuropathy), according to various authors, is found in 7-30.7 % of patients with DM. It is one of the causes of disability and in the majority of patients is detected lately – at the stage of irreversible death of a large number of neurons. Current theories of pathogenesis cover only certain aspects of the development of the disease. Therefore, the study of the new links of the pathogenesis of diabetic optic neuropathy (DON), the development of effective ways of its early diagnosis and therapy becomes an urgent issue of modern ophthalmology.

The assumption of the existence of a relationship between biomechanical peculiarities of the scleral lamina cribrosa (LC) and retinal morphology changes in patients with type II DM seems to be logical.

The objective of the study was to identify the peculiarities of the retinal structural changes in patients with type II DM depending on the scleral LC thickness. 575 patients (1150 eyes) with type II DM and 50 healthy persons (100 eyes) were examined. LC thickness was measured by SD optical coherent tomography using *LC_Thickness_programm.m* and *main_low_noise_filters_programm.m*, based on the adaptive compensation algorithm for eliminating a high-level noise in the deep layers of the optic nerve and improving the visualization of the posterior border of the LC, as well as for processing B-scan with a set of 3 digital filters: Butterworth Low-pass Filter inversion image, Wavelet Low-pass Filter Analysis Daubechies original and inversion image. An average retinal thickness in the fovea, para- and perimacular zones with diameter of examination in 1 mm, 3 mm, 5 mm, respectively were analyzed. The retinal thickness in the superior and inferior halves, in the temporal, nasal and inferior quadrant of the para- and perimacular zone was determined. In the 1st group (78.9% of eyes of diabetic patients) a mild thickening of LC (<700 μ m) was observed; in 17.6% of eyes (the 2nd group) a moderate thickening (700-900 μ m), and in 3.8% of eyes (the 3rd group) – a significant thickening (<900 μ m) was observed. The retinal thickness in the foveolar zone in patients with a moderate LC thickening is 17.1% higher, in patients with a significant LC thickening is 15.6% lower, an average thickness of the paramacular zone in patients with a moderate LC thickening is 7.4% higher, and in patients with a significant LC thickening is 4.4% lower. An average thickness of the perimacular zone in patients with a moderate LC thickening is 6.6% higher, and in patients with a significant LC thickening is 6.4% lower than that in controls.

Thus, as conclusion, we can suggest that tomography peculiarities of retinal structural changes in patients with type II DM depend on the LC thickness.

Kozariichuk N.Ya.

**CERTAIN THERAPEUTIC APPROACHES TO META-HERPETIC KERATITIS
TREATMENT: CASE REPORT**

*B.L. Radzikhovskiy Department of Ophthalmology
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»*

Meta-herpetic keratitis is described as a structural damage by the immune and inflammatory mechanisms as a consequence of HSV-1 corneal infection (Liesegang, T.J. 1999). Meta-herpetic