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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 conducted studies show that an important mechanism of the development and progression of the inflammatory process in the peritoneal cavity is the excessive activity of IL-1β, the concentration of which in the plasma of patients increases in proportion to the spread of the inflammatory process, it is the highest in CT and TT variants of the genotype, and in the SS variant - the lowest.

Conclusion. Thus, to predict the nature of the course of acute peritonitis, the progression of the inflammatory process in the peritoneal cavity in patients, it is advisable to determine variants of the IL-1β gene (-511C/T): with its CT-, TT- variants, an unfavorable course of peritonitis with the spread of process in the peritoneal cavity and to apply preventive comprehensive prevention of the occurrence of complications.

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BIOMARKERS OF INFLAMMATION IN DIABETIC RETINOPATHY MANAGEMENT

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Introduction. An inflammation is intensively involved in the development of diabetic retinopathy (DR) and its complications. The inflammatory process induces a complex cascade of biological, molecular and cellular signals that alter the physiological responses of the affected eye tissues. Some of inflammatory stimulus (oxygen radicals, diabetes, and infections) may disrupt the natural balance of the eye tissues, thus producing an “inflamed” phenotype. As the result of these processes there is increase of inflammatory cytokines expression which contribute to the onset of different eye diseases. To date, the molecular mechanisms that determine the development of ocular pathologies are not fully clarified and there is no therapy capable of preventing eye damage for people with diabetes. Understanding the cellular and molecular mechanisms that lead to eye damage could be useful for the management of diabetic retinopathy.

The aim. To evaluate the influence of biomarkers of Inflammation on diabetic retinopathy.

Material and methods. Market available biomarkers of Inflammation on diabetic retinopathy management were used.

Results. The evaluation of pathphysiological mechanisms in dabetic retinopathy found that early stages are characterized by histopathological changes which include loss of pericytes, basement membrane thickening, haemodynamic alterations leading to reduced vascular integrity. The later stages of diabetic retinopathy are characterized by complications, which include visual impairment, primarily due to macular edema and proliferative diabetic retinopathy. Also the severity of retinopathy was associated with poorer metabolic control, demonstrated by elevated HbA1c. Diabetic complications accompany the accumulation of advanced glycation end products in diabetic tissues. Increased accumulation of these products has been reported in epiretinal membranes by the use of immunohistochemical technique. Binding of advanced glycation end products to high-affinity receptor in pericytes exerts selective toxicity resulting in their death. Vascular endothelial growth factor exert important role of intraocular neovascularization due to ischemic retinopathy

Conclusions. Early stages of diabetic retinopathy are characterized by histopathological changes which include loss of pericytes, basement membrane thickening, haemodynamic alterations leading to reduced vascular integrity. The later stages of diabetic reinopathy are characterized by complications, which include visual impairment, primarily due to macular edema and proliferative diabetic retinopathy. Binding of advanced glycation end products to high-affinity receptor in pericytes exerts selective toxicity resulting in their death.