

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ**



МАТЕРІАЛИ

**106-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького колективу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
03, 05, 10 лютого 2025 року**

Конференція внесена до Реєстру заходів безперервного професійного розвитку,
які проводитимуться у 2025 році №1005249

Чернівці – 2025

УДК 61(063)
М 34

Матеріали підсумкової 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) – Чернівці: Медуніверситет, 2025. – 450 с. іл.

У збірнику представлені матеріали 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) зі стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

Загальна редакція: професор Геруш І.В., професорка Годованець О.І., професор Безрук В.В.

Наукові рецензенти:

професор Батіг В.М.
професор Білоокій В.В.
професор Булик Р.Є.
професор Давиденко І.С.
професор Дейнека С.Є.
професорка Денисенко О.І.
професор Заморський І.І.
професорка Колоскова О.К.
професорка Кравченко О.В.
професорка Пашковська Н.В.
професорка Ткачук С.С.
професорка Тодоріко Л.Д.
професорка Хухліна О.С.
професор Черноус В.О.

ISBN 978-617-519-135-4

© Буковинський державний медичний
університет, 2025

following representatives are more common: *M.catarrhalis*, *S.aureus* and *Bacteroides* spp.; *Prevotella* spp., *S.viridans* and *S.salivarius*; *M.catarrhalis*, *Prevotella* spp. and *S.epidermitis*; *H.influenzae*, *Prevotella* spp. and *S.epidermitis*. Associations consisting of 4 species were found in 34% of patients and consist of *S.pneumoniae*, *M.catarrhalis*, *S.pyogenes*, *Fusobacterium* spp; *S.pneumoniae*, *E.coli*, *S.aureus* and *Candida* spp.; *S.pneumoniae*, *E.coli* Hly+, *S.viridans* and *Candida* spp.

Conclusions. Therefore, the severity of type T1DM with HPRS negatively affects the species composition, population level, qualitative and quantitative dominance of autochthonous obligate and facultative, as well as allochthonous for the habitat of microorganisms and their associations.

The above may indicate the influence of not only the etiological agent, but also a certain association of microorganisms on the severity of HPRS with T1DM, which must be taken into account when choosing etiotropic treatment.

Melnyk I.M.

GENETIC DETERMINATION OF WOUND HEALING PROCESSES

Department of Surgery No. 1

Bukovinian State Medical University

Introduction. Early healing is a complex and long-term process implemented by numerous mechanisms that are genetically determined. The expression of each of them depends on the variant of the genotype that encodes this function. Therefore, genetic studies can form the basis for predicting the course of the wound process and developing personalized treatment tactics.

The aim of the study. To investigate the associative relationship between the severity of some wound healing mechanisms and variants of the matrix metalloproteinase-1 (MMP-1) gene.

Material and methods. The single-nucleotide polymorphism rs1799750 1G/2G of the MMP-1 gene was studied by polymerase chain reaction, in automatic mode using the restriction analysis method for genotyping polymorphic loci. The activity of peroxide oxidation was evaluated by the content of malonaldehyde in erythrocytes and blood plasma; activity of catalase, reduced glutathione, ceruloplasmin was determined. Fibrinolytic and proteolytic activity of blood plasma was determined according to the O.L. Kukharchuk's methods.

Results. It was found that the highest expression of the activity of peroxide oxidation processes was observed with the 2G/2G variant of the MMP-1 gene, the lowest one with the 1G/2G variant. On the contrary, the activity of the antioxidant protection system was the highest with the 1G/2G variant, the lowest with the 2G/2G variant. Patients carrying this genotype had a pronounced imbalance between the pro- and antioxidant systems, which is a factor in the progression of inflammatory destructive processes in the wound.

The analysis of the parameters of fibrinolytic activity proved that the dynamics of its components in patients with the 1G/2G variant are the most favorable for wound healing. A significant proportional increase in all components of fibrinolysis creates conditions for the normal course of the wound process and rapid wound healing.

Patients with the 2G/2G variant had a decrease in both total and enzymatic fibrinolytic activity during the entire observation period, which is evidence of an imbalance in the hemostasis system in such patients and necessitates correction of these processes.

Clear patterns of proteolysis activity in different phases of the wound process were revealed. In the phase of wound cleaning, high protease activity is natural, which directly proportionally depends on the severity of inflammatory and destructive processes in the wound and which decreases in the phase of granulation of the wound.

The excessive activity of these processes, detected by us in carriers of the 2G/2G variant, can interfere with these processes. In the third phase of the wound process, the most significant role is played by proteolytic activity to collagen structures. Its insufficient activity, which we found in carriers of the 2G/2G variant, can contribute to the disruption of the processes of organization of cellular and fibrous components of connective tissue, lead to the distortion of these processes.

Conclusions. According to clinical and laboratory signs, the 2G/2G variant of the MMP-1 gene should be considered unfavorable for wound healing processes. Patients who are carriers of the 2G/2G variant of the MMP-1 gene need personalized treatment tactics aimed at correcting the impaired mechanisms and processes of wound healing.

Moroz P.V.

LAPAROSCOPY AS A DYNAMIC DEVELOPING DIRECTION FOR THE PERITONITIS TREATMENT

Department of Surgery No. 1

Bukovinian State Medical University

Introduction. One of the reasons for the high mortality rate (18-68%) in widespread peritonitis is untimely treatment of the patient, late diagnosis and factors affecting the progression of the inflammatory process in the peritoneal cavity.

The difficulty of diagnosis is complicated by both objective reasons such as the use of analgesic and antibacterial drugs, multi-purpose therapy, and subjective reasons like the presence of negativism in the patient's attitude to the operation. Operative intervention in peritonitis is aimed at solving at least four tasks, namely elimination of peritonitis cause; the peritoneal cavity effective rehabilitation; creation of conditions for monitoring the course of the inflammatory process; exudate evacuation.

With the development of modern surgery, there is a need to identify the highest priority method for treatment of acute peritonitis various forms. The introduction of laparoscopic technologies is considered the most promising direction in the diagnosis and peritonitis treatment.

The aim of the study. To evaluate the possibilities and effectiveness of laparoscopic technologies in the treatment of patients with various acute peritonitis forms.

Material and methods. The clinical material consisted of 104 patients with various acute peritonitis forms, in the complex treatment of which laparoscopic methods were used. The age of the patients varied from 19 to 76 years, among them there were 42 men and 62 women.

Results. Analyzing the research conducted by various surgical schools, we found out that with widespread forms of peritonitis, it is almost impossible to carry out one-time sanitation to obtain abacterity. In this regard, there is a need for repeated operations to ensure active sanitation and drainage of the peritoneal cavity. For this purpose, programmed laparotomy does not lose its relevance, however, there are already many developed laparoscopic techniques that allow avoiding the use of laparotomy approaches.

One of these methods is the use of special devices that allow laparoscopic instruments to be inserted into the peritoneal cavity through the left ports, which served as places for drains during the period between rehabilitations. This made it possible to carry out repeated renovations without the risk of damaging the structures when the tools were installed.

Conclusions. Thus, under certain conditions, laparoscopic technologies make it possible to reliably eliminate peritonitis cause, to carry out the peritoneal cavity effective rehabilitation and its drainage, however, in case of doubts about their adequacy, it is necessary to use laparotomic techniques, including programmed laparotomy. For this reason, the use of programmed laparoscopy in the treatment of peritonitis reduces the patient's stay in the hospital and the days spent in bed, avoids a large number of postoperative complications and improves patients' life quality.

Penishkevych Ya.I.

ASSESSMENT OF INFLAMMATION IN DIABETIC RETINOPATHY

Department of Pediatric Surgery, Otolaryngology and Ophthalmology

Bukovinian State Medical University

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