

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



**МАТЕРІАЛИ**

**106-ї підсумкової науково-практичної конференції  
з міжнародною участю  
професорсько-викладацького колективу  
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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.

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with CP of unknown origin, the distribution in age groups was as follows: 18-39 – 0 patients, 40-59 – 2 (18.18%), 60 and older – 9 (81.82%).

Analyzing data on the age distribution of patients with biliary genesis CP, we obtained data indicating an almost linear dependence of the increase in the number of patients with age. This seems understandable and natural, considering the duration of exposure to harmful nutrition of a person throughout his life. Accordingly, this gives us grounds for quantitative prediction regarding the detection of patients with biliary genesis CP depending on age.

As for the incidence of alcoholic genesis CP, it turned out that the peak (50%) was observed in the most productive and active age - 40-59 years. After reaching the age of 60, the number of such patients decreases. In our opinion, this is due to the fact that the number of these patients, almost 30%, does not live to the age of 60 due to alcohol abuse and the resulting medical and household complications.

A statistical analysis of the group of patients with uncertain origin CP by age group revealed an interesting pattern: from the absence of such cases in the age group of 18-39 years, isolated cases of the disease (18.81%) in the age group of 40-59 years, to a rapid increase in the number of such patients (81.82%) after reaching the 60 years old. Such a sharp increase in the incidence of unknown genesis CP, in our opinion, is due to the misdiagnosis of this pathology or the masking of other diseases.

**Conclusions.** The highest incidence of alcoholic genesis CP is observed in the most productive and active age. The increase of patients number with biliary genesis CP is observed continuously throughout life in an almost linear relationship, which is associated with their acquisition of gallstone disease with age. The increase of patients number with uncertain genesis CP is caused, in our opinion, by misdiagnosis, or by masking other diseases of the abdominal cavity under CP diagnosis.

**Malinevska-Biliichuk O.V.**

## **PROGNOSTIC ROLE OF C-REACTIVE PROTEIN AND ENDOTHELIN-1 DETERMINATION IN PATIENTS WITH CHRONIC CORONARY SYNDROME**

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**Introduction.** C-reactive protein (CRP) and endothelin-1 (ET-1) are promising biochemical markers for cardiovascular prognosis. CRP plays a key role in the pathophysiology of atherosclerosis and is classified as an acute phase protein, while cardiovascular diseases are considered inflammatory conditions. Research by S. Schulz et al. demonstrates that an increase in CRP up to 0.5 mg/dL and more is regarded as a predictor of an adverse cardiovascular disease outcome during a 10-year follow-up. ET-1 is one of the most powerful vasoconstrictors, an antagonist of NO, the increase of which is associated with endothelial dysfunction.

**The aim of the study.** To evaluate the prognostic role of determination of CRP and ET-1 in patients with chronic coronary syndrome, including the analysis of digitalized ECG indicators based on the "Smart-ECG" software.

**Materials and methods.** 46 patients with chronic coronary syndrome (CCS) were included in the study. According to the value of CRP, the patients were divided into two groups: 18 people with a CRP level  $\geq 0.5$  mg/dl and 28 patients with a CRP  $< 0.5$  mg/dl. Depending on the level of ET-1, the participants were divided into a group with ET-1  $\geq 7.83$  pg/ml, which consisted of 23 patients, and with ET-1  $< 7.83$  pg/ml, which included 23 people.

**Results.** Increasing CRP  $\geq 0.5$  mg/dL and ET-1  $\geq 7.83$  pg/ml is associated with more frequent occurrence of various types of rhythm disturbances ( $p < 0.05$ ), higher heart rate by 9.85% and 17.07% respectively ( $p = 0.001$  in both cases), by lower indicators of the maximum speed ratio (MSR) of the differentiated electrocardiogram in the zone of ischemia ( $p = 0.001$ ), which indicates a more pronounced imbalance of the electrogenesis of the ischemic myocardium. In the group with a level of CRP  $\geq 0.5$  mg/dL, higher ET-1 was noted, which in percentage ratio was  $\Delta +58.10\%$  compared to group II (10.83 (9.94; 12.64) vs. 6.85 (6.26; 7.63) pg/ml at  $p < 0.001$ ). Worse

myocardial systolic capacity was recorded in the group with CRP  $\geq 0.5$  mg/dL, which was evidenced by lower left ventricle ejection fraction (LVEF) ( $\Delta -8.33\%$ ,  $p=0.012$ ). The estimated regression equation for comparing CRP with ET-1 indicates a strong direct correlation ( $r_{XY}=0.909$ ), with the MSR in the ischemic zone – an average inverse correlation ( $r_{XY}= -0.566$ ). The correlation between CRP and LVEF is described as a weak inverse ( $r_{XY} = -0.342$ ),  $p>0.05$ . The correlation between CRP and the height of the ST segment slope (STH) in the ischemic zone of the digitalized ECG is a weak straight line ( $r_{XY}=0.227$ ),  $p>0.100$ . The construction of the multiple regression equation with the dependent variable CRP and factors of common influence - ET-1, LVEF, MSR, and STH in the ischemic zone shows a strong connection, statistically significant ( $R^2=0.8284$ ,  $p<0.001$ ).

**Conclusions.** Higher values of markers of inflammation and endothelial dysfunction CRP and ET-1 in patients with CCS indicate the tendency of the myocardium to generate arrhythmias and adverse changes in the electrical balance of the myocardium, as indicated by the indicators of the digitalized ECG, which causes a negative cardiovascular prognosis.

**Mikulets L.V.**

## **MASKS OF PARANEOPLASTIC SYNDROME IN ELDERLY PATIENTS**

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**Introduction.** Paraneoplastic syndrome is a collection of clinical manifestations that occur as a result of a tumor process but are not related to direct tumor invasion or metastases. In elderly patients, this syndrome can have various "masks," mimicking rheumatological diseases such as rheumatoid arthritis, dermatomyositis, or polymyositis, among others. With aging, the frequency of oncological diseases increases, raising the risk of developing paraneoplastic conditions. However, their diagnosis is complicated by multiple comorbidities, age-related changes in the body, and nonspecific symptoms that delay the timely detection of oncological pathology.

**The aim of the study.** To analyze the clinical features of paraneoplastic syndrome in elderly patients and identify the main "masks" of this syndrome that imitate rheumatological diseases.

**Material and methods.** The study involved 50 elderly patients (aged 65 and older) who were hospitalized for rheumatological diseases. Clinical and laboratory data were used for diagnosis, including a complete blood count, biochemical markers, serological tests, as well as imaging methods (X-ray, computed tomography (CT), magnetic resonance imaging (MRI)).

**Results.** All patients exhibited elevated levels of inflammatory markers (C-reactive protein (CRP), erythrocyte sedimentation rate (ESR)), and in some cases, specific tumor markers. Patients were divided into groups based on clinical manifestations: rheumatoid-like syndrome (38% of cases), polymyalgia rheumatica (16%), dermatomyositis (18%), other atypical manifestations (22%), and systemic scleroderma (6%).

**Polymyalgia rheumatica:** Symptoms included pain in the shoulder and pelvic girdles, increased fatigue, and decreased appetite. CRP levels were also significantly elevated. Further examination revealed the presence of malignant tumors, predominantly lung and breast cancer.

**Dermatomyositis:** Patients demonstrated skin rashes (heliotrope rashes) and proximal muscle weakness. Tests revealed elevated levels of creatine kinase and antinuclear antibodies. Upon further examination, most cases were diagnosed with gastrointestinal and lung tumors.

**Rheumatoid-like syndrome:** Symmetrical arthritis of the small joints of the hands and feet was often misdiagnosed as rheumatoid arthritis. However, further examination (CT, MRI) revealed tumors in the lungs and prostate.

**Other atypical manifestations:** This group included systemic inflammatory conditions, myositis, and vasculitis, accompanied by significantly elevated markers of inflammation (CRP, ESR). Various oncological diseases were also identified in these patients.

**Conclusions.** Thus, paraneoplastic syndrome in elderly patients can present with various clinical masks that imitate rheumatological diseases, significantly complicating its diagnosis. Detecting such conditions is crucial for the timely diagnosis of oncological diseases. A systematic