МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

105-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
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Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

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У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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Results. Kaliyaperumal et al. compared HRV indicators in patients with COVID-19 with those in healthy individuals. The authors found that HRV frequency parameters, namely LF and HF, were significantly reduced in case of SARS-CoV-2 infection. Additionally, they found that rMSSD was higher in the COVID-19 group compared to healthy individuals. On the contrary, in the study of domestic scientists led by V.Z. Netyazhenko, along with a decrease in total HRV, indicators that characterize mainly the activity of the parasympathetic division of the central nervous system (rMSSD, pNN50 and HF) in patients with COVID-19 were found to be lower than in controls, as well as in coronary heart disease in combination with COVID-19 against the background of a concomitant increase in the value of LF. A few study aimed to analyze autonomic function using HRV indices in the post-COVID period. An observational study by Indian scientists (Shah et al.) involved 92 people who had recently recovered from COVID-19. Violations of autonomous heart rhythm regulation were observed in 15.21% of cases. HRV (RMSSD) was significantly lower in post COVID-19 patients compared to healthy controls (13.9 ± 11.8 ms vs 19.9 ± 19.5 ms; P = 0.01). A significant inverse correlation was documented between HRV [RMSSD] and levels of inflammatory markers viz. CRP (r = −0.30; P = 0.02) and IL-6 (r = −0.36; P = 0.005). A small American observational study (Hasty et al.) showed substantial decreases in HRV preceded elevations in CRP in the ensuing 72 hours with a 90.9% positive predictive value. Early detection of increasing inflammation may prove vital in mitigating the deleterious effects of an abnormal inflammatory response, particularly in COVID-19 patients. This capability could have a major impact in triage and care of moderate to severe COVID-19 patients in major medical centers as well as field hospitals. This study demonstrates the potential value of short-segment, intermittent HRV analysis in COVID-19 patients. Another two studies (Tessa E. Adler et al. USA, Barizien et al., France) indicate the role of COVID-19 in the development of disorders of parasympathetic modulation of heart rate in post-COVID-19 patients. This shift in autonomic balance may indicate increased cardiovascular risk among survivors of severe COVID-19 infection. Chengfen Yin et al. from China suggested the decreases of HRV might help predict cardiac injury earlier than myocardial markers in COVID-19, thus its early identification might help improve patient prognosis. A retrospective cohort study by scientists from the Netherlands (Maartje B.A. Mol et al.) showed that higher HRV predicts greater chances of survival, especially in patients aged 70 years and older with COVID-19, independent of major prognostic factors.

Conclusions. The study of heart rate variability is a non-invasive method of quantitative assessment of the state of the sympathetic and parasympathetic divisions of the autonomic nervous system. A variable heart rate responsive to body needs is thought to confer a survival advantage, whereas a lower HRV is associated with a higher risk of cardiovascular events and mortality. This study demonstrates the potential value of HRV analysis in patients with COVID-19, given the existing evidence of autonomic nervous system dysfunction in these patients.

Semianiv I.O.

EFFECTIVENESS OF TREATMENT OF COMORBID PATHOLOGY OF MULTIDRUG-RESISTANT TUBERCULOSIS AND DIABETES MELLITUS

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Introduction. Diabetes is generally known to be the background for the development of tuberculosis and such comorbidity not only significantly complicates the specific process, but also is one of the main risk factors for tuberculosis recurrence.

The aim of the study is a comprehensive retrospective assessment of the prevalence, features, course of treatment of multidrug-resistant tuberculosis and diabetes mellitus.

Materials and methods. Our study is based on an analysis of statistical data obtained from a retrospective study of 762 case histories and cases of MDR-TB in the register of tuberculosis patients for 2015-2019.

Results. Depending on the type of TB case in our patients, we found that in both groups of the study the recurrence of TB prevailed – 49 cases (55.7%) against TB 39 cases (44.3%) of people in the main group; 363 cases (53.9%) against 311 (46.1%) in the control group ($p < 0.05$).

The rate of successful treatment in gr.2 is probably higher than in gr. 1 (64.7% vs. 61.4%; ($p < 0.05$)). However, a more significant probable difference is characterized by the treatment rate, which in the main group is 27.3% versus 40.3% in the control group (almost 2 times; $p < 0.05$). The rate of ineffective treatment, which in patients with comorbidity was 27.3% (almost every third patient) against 17.6% in group 2 is also important for scientists and practitioners.

Conclusions. There is a clear tendency to increase the comorbid pathology and chemoresistance in the structure of the incidence of tuberculosis, the share of recurrences of tuberculosis in the presence of diabetes mellitus The pulmonary tuberculosis developed significantly more often in middle-aged patients with type 2 diabetes mellitus with moderate and severe states, a subcompensated form, with a complicated course. In patients with diabetes a common tuberculous process in the lungs (79.5% of patients) was registered more often, and in all 100% of patients with syntropy bacterial excretion was registered, as well in all 100% of patients with syntropy bacterial excretion was registered. The rate of successful treatment for the presence of MDR-TB / diabetes syntropy is probably lower in the main group (61.4% vs. 64.7%; ($p < 0.05$)).

Todoriko L.D.

INFLUENCE OF COMORBID PATHOLOGY ON THE FORMATION OF THE POST-VIDAL SYNDROME IN COVID-19

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Introduction. COVID-19 has become a real challenge for healthcare workers around the world in 2019-2020. Today, despite significant successes in overcoming the pandemic, doctors still face the challenges of this infection. One of these challenges was post-COVID syndrome, or long-COVID.

The aim of our study. To evaluate comorbid pathology in patients with post-COVID syndrome.

Evaluation of comorbidities was carried out by the survey in patients with PCS who were treated in hospitals (106 people) using analytical and statistical methods.

Results. It was established that during March-April of 2021 in the group of 56 people with PCS the following diseases were the most common: coronary heart disease (OR = 33.088 [CI 9.444-115.930]), arterial hypertension (OR = 13.641 [CI 6.547-28.422]), diabetes (OR = 4.755 [CI 1.915-11.803]), heart failure (OR = 18.504 [CI 8.200-41.752]), adiposity (OR = 4.828 [CI 2.433-9.581]). Smoking and alcohol abuse were not significant. A combination of comorbid pathology was evaluated using Euler circles. It was established that the combination of all 5 diseases was present in 3 people, of 4 different pathologies - in 6 people, 3 - in 19 people, 2 - in 11 people, one separate pathology - in 17 people. The combination of 3 pathologies was the most common (arterial hypertension, heart failure, obesity) - in 18 people. For the period December 2021 - January 2022 (II stage), the following trends were noted in 50 patients: arterial hypertension (OR = 22.263 [CI 9.116-54.368]), diabetes OR = 41.707 ([CI 12.074-144.074]), heart failure OR = 39.588 [CI 13.187-118.846]) dominated.

Conclusion. So, in persons who were treated in an inpatient setting with COVID-19 there was a greater probability of the formation of a prolonged PCS when combined with such comorbid pathology: coronary heart disease, arterial hypertension, diabetes, heart failure, adiposity. Every eighth patient had a combination of all 4 diseases.