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
присвяченої 80-річчю БДМУ
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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.

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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participate in a cardiac rehabilitation program 69% attended at least half the sessions. One-third (35%) reported "performing planned physical activity to increase physical fitness", but only 16% performed vigorous activities more than 20 min at least 3 times weekly.

The aim of the study. To evaluate the efficiency of early cardiac rehabilitation of patients with acute coronary syndrome.

Materials and methods. 206 patients with nonST elevation myocardial infarction (NSTEMI) were treated at Chernivtsi Regional Cardiology Center. The average length of inpatient treatment was 14 days. The age of patients was from 38 to 67 years old, on an average 52.2 ± 2.7 years. 48 of them were with a provided PCI and 158 no PCI. Compared with patients without PCI, patients with PCI were significantly younger (56.5 vs. 62.4 years, P<0.001) and less likely to have diabetes, hypertension, or any risk factor (except smoking). Phase II of CR was optimally started in the second week after discharge from the hospital.

Results. Cardiovascular risk factors were compared in groups after rehabilitation. The indicators of patients after rehabilitation significantly improved in both groups in 12 months of rehabilitation (p<0.05). A higher outcome in the NSTEMI group with PCI is closely related to CR and adherence to treatment. A slight intensity of exercise in CR was sufficient to reduce cardiovascular risk factors. There were no significant differences in baseline characteristics including age, gender, body mass index, smoking, diabetes, hypertension, lipid profile, statin use, and complete blood count between the two groups. Maximal oxygen consumption (VO2max) improved significantly, especially in the group with 12 months (p<0.001). 18 patients underwent repeated CVG in 9-12 months. Rates of all-cause mortality, re-hospitalization for cardiovascular and cerebrovascular events, and intensive care unit hospitalization were significantly lower in CR participants than in nonparticipants. Relative risks were 0.76 (95% CI 0.60–0.95), 0.78 (95% CI 0.65–0.94) and 0.80 (95% CI 0.70–0.91) respectively. Overall, 44% and 51% of patients were considered adherent to polytherapy at 6 and 12 months of follow-up.

Conclusion. Patients with AMI should be referred to a rehabilitation program as soon as possible after the acute event, especially for those who have not received PCI in the absence of contraindications. Participation in the rehabilitation program: first of all, is associated with a reduced risk of all-cause mortality, re-hospitalization due to cardiovascular and cerebrovascular events, and emergency department admissions during long-term follow-up patients with NSTEMI who did not undergo PCI. Second, it is associated with significantly improved adherence to evidence-based therapy during both 6- and 12-month follow-up among patients with AMI who did not receive PCI at the time of hospitalization. The TSK-SV Heart scale could be used as a reliable, valid questionnaire to measure kinesiophobia in patients with CAD. High-frequency exercise in patients before and after treatment with elective PCV improved maximal aerobic capacity and muscle performance. The exercise program was tolerated and can be used as an alternative to traditional hospital exercise programs. The superiority of CR was determined, even in an unfavorable context, which confirms the recommendations of clinical practice, which consider CR as an integral part of the treatment of CAD.

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LONG-TERM CARDIOVASCULAR OUTCOMES OF COVID-19: ANALYSIS, PREDICTORS, PROGNOSIS.
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Introduction. The COVID-19 pandemic has unleashed a profound and far-reaching global health crisis, with repercussions that extend across the spectrum of society. Ongoing research indicates that COVID-19 may be linked to the emergence of a range of health problems, notably, cardiovascular disorders. However, at present, there is a notable dearth of effective strategies for forecasting the long-term cardiovascular consequences of post-acute COVID-19, and scientific investigations into these effects remain underexplored.

To address this critical knowledge gap, a comprehensive exploration of the cardiovascular implications of post-acute COVID-19 is urgently required. This endeavor holds the potential to not only provide a deeper understanding of the disease but also to pave the way for enhanced care and support for individuals grappling with post-acute COVID-19 conditions. By harnessing the power of research and innovative medical solutions, we can work toward more effective strategies for prediction, prevention, and treatment, ultimately alleviating the burden of cardiovascular complications stemming from the pandemic.

The aim of the study. To provide a longitudinal study of patients after COVID-19 in order to study its long-term outcomes and investigate the clinical predictive factors of their development.

Material and methods. We studied 328 COVID-19 patients admitted to the hospital between February and April 2021, with an average age of 56.1, and 51% of them were males. Excluding individuals with severe comorbidities, prior major cardiovascular events, and in-hospital mortality, we monitored these patients for 12 months after discharge. Our data encompass clinical records, laboratory results, instrumental findings, and medical records collected over the year, analyzed using standard statistical methods. This research offers insights into the long-term effects of COVID-19 among a subset of patients without severe comorbidities or a history of major cardiovascular events, potentially informing future health care strategies and improving post-COVID-19 patient care.

Results. Through an analysis of clinical data, we observed a correlation between elevated levels of C-reactive protein, D-dimer, neutrophil/lymphocyte ratio, and decreased thyrotropin levels, and a heightened 12-month risk of cardiovascular complications. Our longitudinal study revealed that 16.4% of patients experienced major adverse cardiovascular events (MACE), with 8.5% suffering from myocardial infarction, 5.2% from cerebrovascular disorders, and 2.7% from pulmonary embolism. The MACE contributed to cardiovascular-related mortality in 2.4% of the studied population. Overall, the incidence of cardiovascular complications, including first-detected hypertension, arrhythmias and heart failure, reached 25.9%.

The investigation of laboratory findings during course of COVID-19 treatment showed that the level of C-reactive protein was significantly higher in patients who later experienced long-term outcomes (71.02 ± 12,47 mg/L vs. 62,14 ± 10,04 mg/L (p<0,01)). Patients who went on to experience long-term outcomes exhibited significantly higher levels of D-dimer (2,03 ± 0,61 mg/L vs. 1,72 ± 0,24 mg/L (p < 0,01)) and a higher neutrophil/lymphocyte ratio (4,88 ± 1,48 vs. 3,96 ± 1,12(p < 0,01)). The level of thyrotropin was lower in group with cardiovascular outcomes (1,06 ± 0,23 mU/L vs. 1,41 ± 0,35 mU/L (p<0,01)).

Conclusions. The cardiovascular well-being of COVID-19 survivors demands particular consideration due to the elevated risk of post-acute cardiovascular complications associated with the disease. Notably, C-reactive protein, D-dimer, the neutrophil/lymphocyte ratio and thyrotropin may serve as valuable indicators for predicting cardiovascular outcomes in COVID-19 patients.

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REHABILITATION OF PATIENTS WITH MYOCARDIAL INFARCTION: ASSESSMENT OF EFFICIENCY
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Introduction. Rehabilitation of patients after myocardial infarction is relevant and requires an assessment of the effectiveness of rehabilitation, estimation of recovery progress and adjustment of the rehabilitation program.

The aim of the study. In order to evaluate the effectiveness of rehabilitation processes in patients after myocardial infarction (MI), it was proposed to evaluate the response of the cardiovascular system at the beginning and at the end of the rehabilitation period, using a hemodynamic stress test during an ultrasound examination of the heart.

Material and methods. Patients with diagnosed Q and non-Q MI who underwent rehabilitation at the "Regional Clinical Cardiology Center" in Chernivtsi were selected. The