UDC: 616.12-089.84-083-07:615.825

ALGORITHM FOR INDIVIDUALIZING CARDIOREHABILITATION IN PATIENTS AFTER CORONARY INTERVENTION


Nasyrova Zarina Akbarovna[1], Ismati Nigina Odilovna[2]
1 - Samarkand State Medical University, Republic of Uzbekistan, Samarkand;
2 - Samarkand Regional Branch of the Republican Scientific and Practical Center of Cardiology, Republic of Uzbekistan, Samarkand

КОРОНАР АРАЛАШУВДАН КЕЙИНГИ БЕМОРЛАРДА КАРДИОРЕАБИЛИТАЦИЯНИ ИНДИВИДУАЛЛАШТИРИШ АЛГОРИТМИ

Насирова Зарина Акбаровна[1], Исмати Нигина Одиловна[2]
1 - Самарқанд Давлат тиббиёт университети, Ўзбекистон Республикаси, Самарқанд ш.;
2 - Республика кардиология илмий-амалий тиббиёт маркази Самарқанд вилояти филиали, Ўзбекистон Республикаси, Самарқанд ш.

АЛГОРИТМ ИНДИВИДУАЛИЗАЦИИ КАРДИОРЕАБИЛИТАЦИИ У ПАЦИЕНТОВ ПОСЛЕ КОРОНАРНОГО ВМЕШАТЕЛЬСТВА

Насырова Зарина Акбаровна[1], Исмати Нигина Одиловна[2]
1 - Самаркандский государственный медицинский университет, Республика Узбекистан, г. Самарканд;
2 - Самаркандский областной филиал Республиканского научно-практического центра кардиологии, Республика Узбекистан, г. Самарканд

e-mail: info@sammu.uz

Резюме. *Кардиореабилитацияга замонавий ёндашувлар стандарт протоколларни қайта кўриб чиқишни ва реабилитация чора-тадбирларини индивидуаллаштиришга эътибор қаратишни талаб қилади. Ўткир миокард инфарктини ўтказган ва тери орқали коронар аралашувни (ТОКА) бошдан кечирган беморларнинг клиник ҳолатларининг гетерогенлигини ҳисобга олган ҳолда, реабилитация чора-тадбирларини ҳажми ва характери бўйича индивидуал танлаш зарурати яққол намоён бўлади. Ушбу мақолада кардиореабилитацияни индивидуаллаштиришнинг асосий тамойиллари, жумладан беморларни функционал ҳолати, руҳий-ҳиссий зўриқиш даражаси, юрак етишмовчилигининг оғирлиги ва даволанишга мойиллик даражаси бўйича индивидуаллаштириш кўриб чиқилади. Бирламчи текширув, психологик скрининг, жисмоний фаолликни режалаштириш, психо-таълимий қўллаб-қувватлаш ва аралашув самарадорлигини мониторинг қилиш босқичларини ўз ичига олган тузилган алгоритм тақдим этилган. Индивидуал дастурларни ишлаб чиқиш кардиореабилитация самарадорлигини ошириш, ҳаёт сифатини яхшилаш, хавотир ва депрессияни камайтириш, шунингдек, дори-дармон терапиясига содиқликни ошириш имконини беради. Таклиф этилган алгоритм кўп тармоқли шифохоналар ва амбулатор кардиология марказлари амалиётига муваффақиятли интеграция қилиниши мумкин, бу эса янада барқарор клиник натижаларга эришиш ва юрак-қон томир ҳодисаларининг қайталаниш хавфини камайтиришга ёрдам беради.*

Калит сўзлар: *кардиологик реабилитация, индивидуаллаштириш, миокард инфаркти, ТОКА, ҳаёт сифати, хавф стратификацияси, алгоритм.*

Abstract. *Modern approaches to cardiac rehabilitation require rethinking standard protocols and emphasizing individualization of restorative measures. Given the heterogeneity of clinical conditions in patients who have experienced acute myocardial infarction and undergone percutaneous coronary intervention (PCI), the need for personalized selection of rehabilitation measures in terms of volume and nature becomes evident. This article examines the key principles of individualizing cardiac rehabilitation, including patient stratification based on functional status, level of psycho-emotional stress, severity of heart failure, and degree of treatment adherence. A structured algorithm is presented, covering stages of initial assessment, psychological screening, physical activity planning, psycho-educational support, and intervention effectiveness monitoring. Developing individualized programs allows for increased cardiac rehabilitation effectiveness, improved quality of life, reduced anxiety and depression, and increased compliance with drug therapy. The proposed algorithm can be successfully integrated into the prac-*

tice of multidisciplinary hospitals and outpatient cardiology centers, contributing to more sustainable clinical outcomes and reducing the risk of recurrent cardiovascular events.

Keywords: *cardiac rehabilitation, individualization, myocardial infarction, PCI, quality of life, risk stratification, algorithm.*

Introduction. Cardiac rehabilitation is an integral stage in the treatment of patients who have experienced acute coronary syndrome (ACS) and undergone percutaneous coronary intervention (PCI). It includes a set of measures aimed at restoring the patient's physical, psychological, and social status, preventing recurrent cardiac events, and improving disease prognosis. Over the past two decades, the effectiveness of cardiac rehabilitation has been confirmed in a number of randomized clinical trials; however, the widespread implementation of standard protocols does not always yield expected results in everyday clinical practice. This is due to the fact that universal approaches do not account for individual differences between patients - in levels of physical fitness, presence of comorbid conditions, psychoemotional background, and motivation for treatment.

The concept of personalized medicine involves adapting treatment and preventive measures to specific patient characteristics. This is especially important in cardiac rehabilitation, as patients after myocardial infarction (MI) often have varying myocardial functional reserves, severity of heart failure, levels of anxiety and depression, and degrees of treatment adherence.

According to the meta-analysis by Anderson et al. [4], physical cardiac rehabilitation reduces overall mortality by 20% and the frequency of recurrent heart attacks by 26%; however, in 30-40% of cases, patients prematurely terminate their participation in the program. The main reasons for discontinuation are inadequate expectations, excessive physical or emotional stress, and lack of support from the medical team. These facts emphasize the importance of individually selecting the regimen and content of rehabilitation measures.

One of the largest studies in recent years - the EUROACTION Study [6, 9] - has shown that a multidisciplinary, patient-centered approach, including individual consultations, education, adapted exercises, and psychological support, significantly increases adherence to therapy and reduces anxiety and depression. Family members' participation in the rehabilitation process was also associated with better long-term outcomes.

Another study - the REHAB-HF Trial [10, 13, 15], conducted in elderly patients with an ejection fraction of less than 50% - proved that individualized rehabilitation, adapted to intensity, cognitive status, and functional capacity, improves physical endurance, quality of life, and reduces hospitalizations. The authors emphasize that "one size does not fit all" and that programs should be flexible and multicomponent.

Despite the obvious advantages, individualization in cardiac rehabilitation is still rarely implemented in routine practice. This is due to the lack of unified diagnostic and evaluation models that allow for rapid and effective stratification of patients by risk type and selection of an appropriate intervention program. Developing and implementing a standardized algorithm for individualizing cardiac rehabilitation will systematize the approach and increase the accessibility of personalized recovery after PCI, especially in conditions of limited resources.

Thus, **the aim** of this study is to develop a clinically applicable algorithm for individualizing cardiac rehabilitation, taking into account a multifactorial assessment of the patient - functional, psychological, and behavioral.

Research Materials and Methods. This prospective, comparative, and descriptive study was conducted in the Cardiology Department of the Samarkand Regional Multidisciplinary Medical Center from January 2023 to January 2025. A total of 96 patients who had suffered an acute ST-elevation myocardial infarction (STEMI) and successfully underwent percutaneous coronary intervention (PCI) within the first 12 hours of symptom onset were included. All patients were subsequently referred for staged cardiac rehabilitation in a hospital setting, followed by outpatient treatment.

The inclusion criteria were as follows: age between 35 and 75 years, a confirmed diagnosis of ST-elevation myocardial infarction treated by PCI with restoration of TIMI 2–3 blood flow, signed informed consent to participate in the study, and completion of the acute period with clinical stability. Exclusion criteria included severe heart failure corresponding to NYHA functional class III–IV, a history of acute cerebrovascular accident within the previous six months, the presence of oncological diseases or severe renal or hepatic failure, and decompensated mental disorders or cognitive impairment precluding full participation in the rehabilitation program.

All patients underwent a general clinical and instrumental examination, which included standard and chest lead electrocardiography (ECG) and echocardiography (EchoCG) with evaluation of left ventricular ejection fraction (LVEF), regional contractility, and the degree of cardiac remodeling. Functional capacity was assessed using the 6-minute walk test (6MWT) performed on days 7–10 after PCI, with

repeated assessments after one and six months. Cardiovascular risk stratification was performed using the SCORE2 scale.

The psycho-emotional and behavioral assessment included the Hospital Anxiety and Depression Scale (HADS) to determine the severity of anxiety and depressive symptoms, the Perceived Stress Scale (PSS-10) for quantitative evaluation of chronic stress levels, and quality of life assessment using the EQ-5D-5L and MacNew questionnaires, administered before the start of cardiac rehabilitation and repeated after one and six months. Treatment adherence was evaluated using the Morisky-Green Adherence Scale.

Based on the obtained clinical, functional, and psychological data, patients were stratified according to several parameters, including functional level (derived from 6MWT and NYHA classification), psycho-emotional state (high, moderate, or low levels of anxiety and stress), left ventricular ejection fraction (<40%, 40–49%, or ≥50%), and level of motivation and compliance (low, moderate, or high). According to the individual patient profile, a personalized cardiac rehabilitation program was developed and implemented. This program included an adapted regimen of physical exercise such as therapeutic exercises, dosed walking, and interval training; psycho-educational activities focused on emotional regulation and lifestyle modification ("Heart and Emotions," "Life After a Heart Attack," and cognitive-behavioral work); family counseling when indicated; and follow-up visits with re-evaluation every four weeks.

All statistical analyses were performed using SPSS Statistics version 26.0. Quantitative variables were described as mean ± standard deviation (M ± SD). Differences between groups were analyzed using Student's t-test for normally distributed data and the Mann–Whitney U-test for non-normally distributed data. Within-group dynamics were assessed using repeated measures ANOVA. Correlation analyses were conducted using Pearson's or Spearman's methods, depending on the data distribution. A p-value of less than 0.05 was considered statistically significant.

Research Results. The study included 96 patients with a mean age of 59.3 ± 9.1 years, among whom 71 (73.9%) were men and 25 (26.1%) were women. All participants underwent successful myocardial revascularization using percutaneous coronary intervention (PCI) for ST-elevation myocardial infarction (STEMI). The mean left ventricular ejection fraction (LVEF) at baseline was 47.1 ± 6.9%. Upon admission to the rehabilitation unit, 54 patients (56.3%) demonstrated moderate anxiety levels, while 28 patients (29.2%) exhibited high anxiety levels according to the Hospital Anxiety and Depression Scale (HADS). Assessment of quality of life using the EQ-5D-5L questionnaire revealed a significant decline across all domains, with the most pronounced impairments observed in mobility, self-care, and usual activities.

Based on an analysis of clinical, psychological, and functional characteristics, an algorithm for individualized cardiac rehabilitation was developed, consisting of four main stages. During the first stage-initial stratification-patients were classified according to functional status, LVEF, psycho-emotional state, and treatment adherence. Functional status was determined using the 6-minute walk test (6MWT), where distances below 250 meters indicated low capacity, 250–400 meters moderate capacity, and above 400 meters high functional capacity. LVEF was categorized as <40%, 40–49%, or ≥50%. Psycho-emotional status was assessed by HADS, with scores of 11 or higher reflecting high anxiety or depressive symptoms. Treatment adherence was evaluated using the Morisky-Green scale, with scores below 3 indicating low compliance.

The second stage involved the formation of a "rehabilitation profile," in which each patient was assigned an individual risk category. Type A (low risk) included patients with high functional reserve, preserved ejection fraction, and absence of significant psycho-emotional disturbances. Type B (moderate risk) included those with moderate physical activity, reduced motivation, and mild anxiety symptoms. Type C (high risk) comprised patients with limited physical activity, pronounced stress or depression, and low adherence to treatment.

The third stage focused on the implementation of a personalized rehabilitation program. Patients classified as Type A followed a regimen of aerobic exercise 4–5 times per week, participated in physical therapy, used an online activity monitoring platform, and maintained self-monitoring diaries. Type B patients attended group physical therapy sessions and received individual psychoeducational interventions one to two times per week, combined with weekly monitoring by a physician and psychologist. Type C patients were prescribed a gentle regimen with an initial load not exceeding 2 METs, along with cognitive-behavioral therapy, family counseling, and comprehensive medical and social support.

The fourth stage involved continuous performance monitoring and adjustment of the rehabilitation program. Follow-up assessments were conducted at one and six months, including repeat questionnaires, echocardiography, and 6MWT, as well as comparative evaluation of quality of life parameters and psychological status.

After one month of observation, the mean distance covered during the 6-minute walk test increased by 58.2 meters ($p < 0.01$). LVEF im-

proved by an average of 3.4% among patients in groups B and C ($p < 0.05$). The EQ-5D index increased by 21%, with the greatest improvements observed in the domains of self-care and pain/discomfort ($p < 0.001$). The mean HADS score decreased from 10.8 to 6.7, representing an average reduction of 4.1 points ($p < 0.01$). The mean Morisky-Green adherence score increased from 2.6 to 3.9 ($p < 0.001$), reflecting improved adherence to medical treatment.

After six months of follow-up, 82% of patients demonstrated complete restoration of physical activity to age-appropriate levels. Among those who initially exhibited high anxiety, 93% showed significant improvement, achieving HADS scores below 7. The rate of rehospitalization due to ischemic heart disease was only 4.2%. Notably, patients classified as Type C who underwent targeted psycho-emotional correction demonstrated the most pronounced improvements in quality of life, with an average increase of 1.3 points on the MacNew questionnaire ($p < 0.01$).

Overall, the 96 patients included in the study-each of whom had suffered an acute myocardial infarction and undergone PCI-were stratified into three rehabilitation profiles: Type A (n = 32), Type B (n = 38), and Type C (n = 26), according to clinical and psychological characteristics.

The average age of patients increased from type A to type C: in type A - 56.4 ± 7.8 years, in type B - 59.2 ± 9.3 years, and in type C - 62.1 ± 8.5 years. In all three groups, men predominated (respectively 75.0%, 73.7% and 73.1%). Left ventricular ejection fraction (LVEF) decreased significantly as the profile worsened: in patients with type A it was 52.1±4.3%, in type B - 47.3±5.1%, and in type C - only 41.7±5.8%, which reflects the progressive deterioration of myocardial systolic function. Functional endurance, assessed using the 6-minute walk test (6MWT), also significantly decreased from type A to type C: 432±45 m, 354±39 m, and 256±41 m, respectively. According to the HADS anxiety scale, the lowest values were recorded in patients with type A (5.2±1.1 points), while patients with type B had moderately pronounced anxiety (8.7±1.5 points), and type C had pronounced anxiety (11.3±2.2 points). Assessment of stress levels on the PSS-10 scale revealed a clear trend towards its increase: type A - 12.4 ± 3.2 points, type B - 16.5 ± 2.9 points, and type C - 20.8 ± 3.6 points. The quality of life index on the EQ-5D-5L scale decreased with the transition from type A (0.81 ± 0.09) to type C (0.55 ± 0.13), reflecting a general deterioration in the subjective perception of the state of health. Finally, adherence to therapy was highest in type A patients (3.7±0.6 points), moderate in type B (3.1±0.8 points), and minimal in type C (2.4±0.9 points), which emphasizes the need for individualized motivational strategies depending on the psycho-emotional profile.

During the study, the dynamics of clinical and psychological indicators in patients of three types (A, B, and C) were assessed after six months of cardiac rehabilitation. In type A patients, an improvement in the 6-minute walk test (6MWT) distance from 432 to 510 meters ($p<0.01$) was noted, indicating good functional recovery. In type B, the increase was from 354 to 448 meters ($p<0.01$), while in type C, it was from 256 to 372 meters ($p<0.001$), demonstrating the highest degree of improvement against a background of initially poorer indicators. Left ventricular ejection fraction (LVEF) increased from 52.1% to 54.6% in type A patients, from 47.3% to 50.2% in type B, and from 41.7% to 45.1% in type C, with the latter group showing statistically significant changes ($p<0.05$).

The level of anxiety on the HADS scale decreased in all groups: in type A patients - from 5.2 to 3.1 points, in type B - from 8.7 to 4.5, and in type C - from 11.3 to 5.6 points, with the differences in the latter group being statistically significant ($p<0.01$). A similar trend was observed on the PSS-10 stress perception scale, where values decreased from 12.4 to 9.1 in type A, from 16.5 to 11.3 in type B, and from 20.8 to 13.6 in type C.

The EQ-5D-5L quality of life index improved in all three groups: from 0.81 to 0.91 in type A, from 0.68 to 0.83 in type B, and from 0.55 to 0.77 in type C. Positive dynamics were also noted in the level of adherence to therapy: in type A - from 3.7 to 4.2 points, in type B - from 3.1 to 3.9, and in type C - from 2.4 to 3.7 points.

Table 1. Patient characteristics by rehabilitation profiles (n=96)

Indicator	Type A (n=32)	Type B (n=38)	Type C (n=26)
Average age, years	56,4 ± 7,8	59,2 ± 9,3	62,1 ± 8,5
Men, %	75,0	73,7	73,1
Left ventral ejection fraction, %	52,1 ± 4,3	47,3 ± 5,1	41,7 ± 5,8
6-minute walk test, m	432 ± 45	354 ± 39	256 ± 41
HADS (Alarm), points	5,2 ± 1,1	8,7 ± 1,5	11,3 ± 2,2
PSS-10 (stress level), points	12,4 ± 3,2	16,5 ± 2,9	20,8 ± 3,6
EQ-5D-5L (general index)	0,81 ± 0,09	0,68 ± 0,11	0,55 ± 0,13
Adherence to treatment (points)	3,7 ± 0,6	3,1 ± 0,8	2,4 ± 0,9

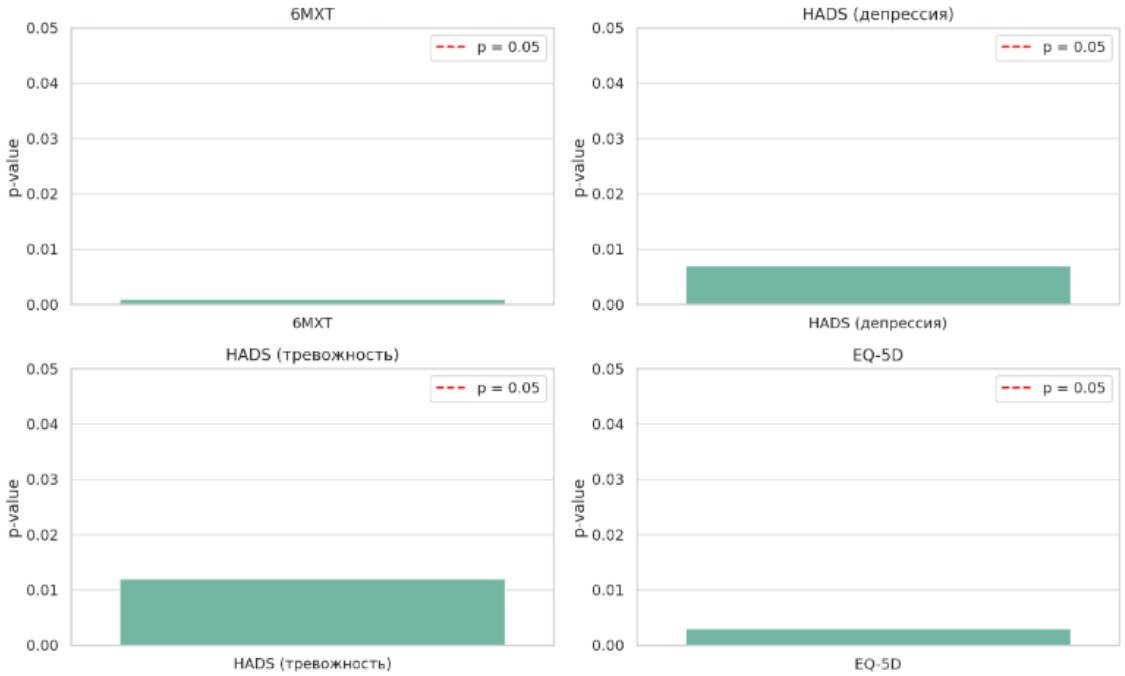

Fig. 1. Statistical significance of differences between groups

Table 2. Dynamics of indicators after 6 months of cardiac rehabilitation

Indicator	Type A (n=32)	Type B (n=38)	Type C (n=26)
6MTH, m	432 → 510 (p<0,01)	354 → 448 (p<0,01)	256 → 372 (p<0,001)
LVEF, %	52,1 → 54,6	47,3 → 50,2	41,7 → 45,1 (p<0,05)
HADS (Alarm), points	5,2 → 3,1	8,7 → 4,5	11,3 → 5,6 (p<0,01)
PSS-10, points	12,4 → 9,1	16,5 → 11,3	20,8 → 13,6
EQ-5D-5L (index)	0,81 → 0,91	0,68 → 0,83	0,55 → 0,77
Adherence to treatment, points	3,7 → 4,2	3,1 → 3,9	2,4 → 3,7
Frequency of hospitalizations, %	0	2,6	7,7

The hospitalization rate at the end of the observation period was 0% in the type A group, 2.6% in type B, and 7.7% in type C, which emphasizes the clinical significance and effectiveness of rehabilitation, especially in patients with initially more severe conditions.

Discussion of the research results. The obtained results confirm the high effectiveness of an individualized approach in the cardiac rehabilitation of patients who have undergone acute myocardial infarction and PCI. Stratification of patients by functional, psycho-emotional, and behavioral characteristics allowed for the development of targeted, more acceptable rehabilitation programs for patients. The identified differences in the dynamics of indicators between groups A, B, and C emphasize the need for flexible adaptation of physical and psychological interventions. Particularly significant are the improvements in high-risk patients (type C), who, despite an initially unfavorable profile, demonstrated significant improvement in both somatic and psycho-emotional states. This indicates the key role of a multidisciplinary approach and the importance of including cognitive behavioral therapy in rehabilitation programs. The implementation of the individualization algorithm also led to a decrease in repeated hospitalizations, which may indicate increased stability of the achieved results and a potentially positive impact on the economic indicators of the healthcare system. Comparison with previously published data, such as the EUROACTION and REHAB-HF studies, shows that the proposed model aligns with international trends, while having a clear structure and applicability in hospitals with limited resources.

Conclusion. The developed and implemented algorithm for individualized cardiac rehabilitation demonstrates high clinical effectiveness. Its application allows for: increasing the accuracy of patient risk stratification; selecting optimal forms of physical and psychological support; improving quality of life, physical endurance, and adherence to therapy; and reducing the frequency of repeated hospitalizations and complications. The application of such an algorithm is especially relevant in multi-profile institutions and outpatient centers, where decision-making speed, a personalized approach, and efficient resource utilization are crucial. The implementation of this model can be an important step towards realizing the principles of personalized cardiology and reducing the burden of ischemic heart disease.

Literature:

1. Ambrosetti M, Abreu A, Corra U, et al. Secondary prevention through comprehensive cardiovascular rehabilitation: From knowledge to implementation. Eur J Prev Cardiol. 2021;28(5):460–495.
2. Anderson L, Oldridge N, Thompson DR, et al. Exercise-based cardiac rehabilitation for coronary heart disease: Cochrane systematic review and meta-analysis. Cochrane Database Syst Rev. 2016;(1):CD001800.
3. Dalal HM, Doherty P, Taylor RS. Cardiac rehabilitation. BMJ. 2015;351:h5000.
4. European Society of Cardiology. Guidelines for cardiac rehabilitation // Eur Heart J. - 2020. - Vol. 41, No. 3. - P. 112–122.
5. Fihn SD, Blankenship JC, Alexander KP, et al. ACC/AHA/AATS/PCNA/SCAI/STS focused update of the guideline for the management of patients with stable ischemic heart disease. J Am Coll Cardiol. 2014;64(18):1929–49.
6. Kitzman DW, Whellan DJ, Duncan P, et al. Physical rehabilitation for older patients hospitalized for heart failure (REHAB-HF): A multicentre randomized clinical trial. N Engl J Med. 2021;385(3):203–216.
7. Lee D, Ardern CI, Janssen I. The association between cardiorespiratory fitness and health-related quality of life. Am J Public Health. 2007;97(4):705–711.
8. Piepoli MF, Corrà U, Benzer W, et al. Secondary prevention through cardiac rehabilitation: From knowledge to implementation. Eur J Cardiovasc Prev Rehabil. 2010;17(1):1–17.
9. Rizaev J.A. et al. The importance of comorbid conditions in the development of chronic heart failure in elderly and senile patients // Achievements of science and education. - 2022. - No. 1 (81). - P. 75-79 (in Rus).
10. Rizaev J.A., Agababyan I. R. The relationship between periodontal diseases and acute coronary syndrome (literature review) // Journal of Biomedicine and Practice. - 2022. - Vol. 7. - No. 4. - P. 252 (in Rus).
11. Rizaev J.A., Aghababyan I. R., Ismoilova Yu. A. World experience of specialized clinics for the treatment of patients with chronic heart failure // Vestnik Vrachei. - 2021. - No. 3. - P. 100 (in Rus).
12. Агеев Ф.Т., Недогода С.В. Проблемы комплаентности и пути её повышения // Кардиоваскулярная терапия и профилактика. - 2020. - Т. 19, № 1. - С. 113–119.
13. Боброва Н.А., Кириллова Е.В. Персонализированный подход в кардиореабилитации // Кардиология. - 2019. - Т. 59, № 2. - С. 87–93.
14. Волкова М.Ю., Виноградов А.Н. Индивидуализация программ физической реабилитации у кардиологических пациентов // Вестник восстановительной медицины. - 2018. - № 3. - С. 12–18.
15. Далин А.И. Психологическая поддержка пациентов после инфаркта: возможности когнитивно-поведенческой терапии // Психиатрия и психология. - 2020. - Т. 9, № 4. - С. 45–49.
16. Кардиореабилитация в клинической практике / Под ред. А.М. Громашевского. - М.: ГЭОТАР-Медиа, 2020. - 288 с.
17. Сидорова Н.А., Романов Ю.А. Использование шкал HADS и EQ-5D в оценке качества жизни кардиологических пациентов // Вопросы современной медицины. - 2019. - № 4. - С. 56–61.
18. Шляхто Е.В., Барбараш О.Л. Современные аспекты вторичной профилактики и реабилитации после ИМ // Российский кардиологический журнал. - 2021. - № 7 (143). - С. 19–26.

АЛГОРИТМ ИНДИВИДУАЛИЗАЦИИ КАРДИОРЕАБИЛИТАЦИИ У ПАЦИЕНТОВ ПОСЛЕ КОРОНАРНОГО ВМЕШАТЕЛЬСТВА

Насырова З.А., Исмати Н.О.

Резюме. *Современные подходы к кардиореабилитации требуют переосмысления стандартных протоколов и акцента на индивидуализации восстановительных мероприятий. Учитывая гетерогенность клинических состояний пациентов, перенесших острый инфаркт миокарда и перенесших чрескожное коронарное вмешательство (ЧКВ), становится очевидной необходимость персонализированного подбора реабилитационных мероприятий по объему и характеру. В данной статье рассматриваются основные принципы индивидуализации кардиореабилитации, включая стратификацию пациентов по функциональному статусу, уровню психоэмоционального напряжения, тяжести сердечной недостаточности и степени приверженности лечению. Представлен структурированный алгоритм, охватывающий этапы первичного обследования, психологического скрининга, планирования физической активности, психообразовательной поддержки и мониторинга эффективности вмешательства. Разработка индивидуальных программ позволяет повысить эффективность кардиореабилитации, улучшить качество жизни, снизить тревожность и депрессию, а также повысить приверженность к медикаментозной терапии. Предложенный алгоритм может быть успешно интегрирован в практику многопрофильных стационаров и амбулаторных кардиологических центров, способствуя достижению более устойчивых клинических результатов и снижению риска рецидивов сердечно-сосудистых событий.*

Ключевые слова: *кардиологическая реабилитация, индивидуализация, инфаркт миокарда, ЧКВ, качество жизни, стратификация риска, алгоритм.*