

Assessment of the Quality of Life of Patients with Deforming Osteoarthritis in Primary Health Care

Salaeva M.S., Saidkhonova A.M., Parpibaeva D.A., Salimova N.D.,
Tursunova M.U., Ergashov N.Sh.
Tashkent Medical Academy, Tashkent, Uzbekistan

Abstract.

Background. The article devoted to the questions of the improving quality of life in outpatient clinic and characteristic of the most effective methods of therapeutic physical training in patients.

Materials and methods. All patients were divided into 2 groups: Group 1 (the main group) consisted of 35 patients who received therapeutic exercise, chondroprotector (1000 mg per day) peros for 3 months in combination with NSAIDs. The 2nd group (control group) consisted of 25 patients who received chondroprotector, NSAIDs. Patients of both groups had no significant differences in age, duration of the disease and radiological stage of the disease.

Results and discussion. In the study group, the number of patients receiving NSAIDs decreased to 10% ($P < 0.05$) by the end of 3 months, while in the control group this figure was 70% ($P < 0.05$). According to the questionnaire of the quality of life SF-36 dynamics in the main group of patients the indices characterizing their physical health improved.

Conclusions. Thus, the use of therapeutic physical training in combination with the conventional DOA treatment scheme for 3 months, as compared to the control group, significantly reduced the joint syndrome, pain, increased functional ability, improved physical activity, and general state of health.

Key words: improving quality of life, deforming osteoarthritis, healing fitness, questionnaire SF-36.

Nowadays, there is a large group of chronic musculoskeletal diseases of different etiologies, but with the same pathogenetic mechanism of inflammatory-degenerative changes of the entire tissue complex of joints (cartilage, subchondral bone, synovial membrane, ligaments, capsule, periarticular tissues) and similar clinical manifestations, leading to deep damage of joint structure with cartilage loss and partial or even complete loss of their function [3, 1, 2].

Deforming osteoarthritis (DOA) is of great socioeconomic importance because of its high prevalence, the frequent development of disability in patients, especially in older age groups, and the associated decrease in the quality of life of patients [4].

DOA ranks second, after osteoporosis, in the ranking of diseases of bones and joints, which have the most important medical and social significance [5, 6, 7]. The prevalence and incidence of DOA are constantly increasing. For example, in 2002, the prevalence of osteoarthritis was 13.2 million in the United States, 14.5 million in Europe, and 6.6 million in Japan; in 2006, the prevalence of OA of the knee joints among the population aged 65-70 years exceeded 1000 per 100,000 population [8].

According to the world statistics, OA ranks 2nd by the number of days and 3rd by the number of cases of temporary disability among people of working age.

At present, due to the considerable aging of the population, the problem of prevention and treatment of DOA is particularly relevant, since the processes of articular cartilage repair and degradation, which are normally balanced, become imbalanced with age [8].

Materials and methods.

Case-control study. The study was conducted in 2013-2016 in the family polyclinic No. 9 of Tashkent with the participation of 60 patients 43-76 years old (56.52 ± 2.4) suffering from osteoarthritis with duration of disease from 1 to 25 years (11.3 ± 1.1). According to the radiological stage of the disease, patients were divided as follows: Stage I and II, 65% and 35%; Stage III and IV, 35%. All patients were divided into 2 groups: Group 1 (the main group) consisted of 35 patients who received therapeutic exercise, chondroprotector (1000 mg per day) peros for 3 months in combination with NSAIDs. The 2nd group (control group) consisted of 25 patients who received chondroprotector, NSAIDs. Patients of both groups had no significant differences in age, duration of the disease and radiological stage of the disease. Treatment efficacy was determined monthly according to the scheme: clinical examination - functional index WOMAC; laboratory blood examination - sedimentation rate, C-reactive protein, transaminases, bilirubin; radiological examination of the affected joints and determination of quality of life indicators by SF-36 questionnaire.

Results and discussion.

When analyzing the results obtained in the study of the effect of physical therapy on the disease, it was found that the clinical effectiveness comes on average at 4 weeks and reaches a maximum at 12 weeks. Thus, in the study group, the number of patients receiving NSAIDs decreased to 10% ($P < 0.05$) by the end of 3 months, while in the control group this figure was 70% ($P < 0.05$). We also studied the WOMAC functional index. Thus, when analyzing pain by VAS before treatment the mean WOMAC index was 4.45, after treatment it was -0.80, the decrease of the index was 81.9% ($P < 0.05$); movement restrictions before treatment the mean index was 4.7, after treatment it was 1.0, the decrease of the index was 78.7% ($P < 0.05$). The mean functional index before treatment was 4.69, after treatment was 1.27; the decrease in the index was 72.6% ($P < 0.05$). The mean functional WOMAC index for all criteria decreased by 75.3% ($P < 0.05$) by the end of treatment. According to the questionnaire of the quality of life SF-36 dynamics in the main group of patients the indices characterizing their physical health improved. Thus, physical activity (PF) improved by 32.4% ($p < 0.05$), physical role functioning (RP) by 33.8% ($p < 0.05$), body pain (BP) by 39.7% ($p < 0.05$), and general health (GH) by 16.8% ($p < 0.05$).

Conclusions. Thus, the use of therapeutic physical training in combination with the conventional DOA treatment scheme for 3 months, as compared to the control group, significantly reduced the joint syndrome, pain, increased functional ability, improved physical activity, and general state of health.

References:

1. Арнот Б. Защити свои суставы / пер. с англ. И. В. Гродель. – М. : ООО Попурри, 2005. - 320 с. (Серия «Здоровье в любом возрасте»)

2. Бородулин С.Н., Братчикова В.А., Карягин В.В., Ачимов А.П. Применение интегрального показателя для оценки нарушения статодинамической функции у больных с деформирующим остеоартрозом коленного сустава // *Медико-социальная экспертиза и реабилитация*, 2012. -N 1. -С.52-55.
3. **Коваленко В.Н., Борткевич ОП. Остеоартроз. Практическое руководство. – Киев: Морион, 2003. – 448 с.**
4. **Насонова ВА, Фоломеева ОМ. Медико-социальное значение XIII класса болезней для населения России // Научно-практическая ревматология. – 2001. – №1. – С.7-11.**
5. **Поворозюк В.В. Остеоартроз: современные принципы лечения // Здоровье Украины. -2003.-№ 3 (9).– С.16-21.**
6. **Яременко О.Б., Решотько ДА. и др. Новые возможности симптоматической противовоспалительной терапии ревматоидного артрита // "Здоров'я України", Ревматологія. Власне дослідження. – 2008. – № 3. – С.38-45**
7. **Felson D.T. Osteoarthritis of the knee // N. Engl. J. Med.-2006.- Vol.354. – P.841-848.**
8. Jordan K.M. E et al., 2003ЖНасонов Е.Л., 2004; Squires G.R. и др., 2004
9. Парпибоева, Д. А., Шукурова, Ф. Н., & Каримов, М. Ш. (2020). Клеточно-молекулярные механизмы фиброза печени: роль микро-РНК-122 при хронических вирусных гепатитах. *Экспериментальная и клиническая гастроэнтерология*, (8 (180)), 50-53.
10. Закирходжаев, Ш. Я., Парпибаева, Д. А., & Каримова, Д. А. (2013). Клинико-иммунологические и микроциркуляторные особенности язвенной болезни двенадцатиперстной кишки на фоне хронического гепатита. *Сибирское медицинское обозрение*, (6 (84)), 57-61.
11. Parpibaeva, D. A., Sh, E. N., Musaeva, M. A., Boltaboev, X. K., & Turbanova, U. V. (2023). SIMULATION TRAINING IN MEDICINE: FROM PROBLEM TO SOLUTION.
12. Parpibaeva, D., Salaeva, M., Salimova, N., & Abdurakhmanova, L. (2022). Simulation training in medicine: the state and direction of development of simulation training at the tashkent medical academy.
13. Parpibaeva, D., Salaeva, M., Salimova, N., & Abdurakhmanova, L. (2022). Simulation training in medicine: the state and direction of development of simulation training at the tashkent medical academy.
14. Salimova, N. D., Salaeva, M. S., Mirakhmedova Sh, T., & Boltaboev, H. K. (2023). Simulation training in medicine. *Journal of Modern Educational Achievements*, 3(3), 138-142.
15. Parpibayeva, D. A., Salimova, N. D., Ergashov, N., Baltabayev, H. Q., & Sultanova, M. X. (2022). Tibbiyotda simulyatsion o'qitish: muammodan yechimgacha.
16. Ayupovna, P. D., Saidabdullayevna, S. M., Djurabaevna, S. N., Shermuxamat o'g'li, E. N., & Taxirovna, B. N. (2023). FINAL STATE CERTIFICATION OF GRADUATES OF THE TASHKENT MEDICAL INSTITUTE USING AN INTERACTIVE APPLICATIONS ACADEMIX 3D. *Spectrum Journal of Innovation, Reforms and Development*, 14, 1-7.

17. Ayupovna, P. D. (2023). EVALUATION OF THE EFFECTIVENESS OF SIMULATION TRAINING IN TEACHING HEART AND LUNG AUSCULTATION.
18. Najmutdinova, D. Q., Parpibaeva, D. A., Salaeva, M. S., Salimova, N. D., Ergashov, N. S., & Sultonova, D. A. (2023). The role of fenofibrate (trikor) in the complex treatment of microangiopathic complications in patients with type 2 diabetes.
19. Жаббаров, А. А., Бувамухамедова, Н. Т., & Мирзаева, Г. Ф. (2021). ОЦЕНКА ФУНКЦИОНАЛЬНОГО СОСТОЯНИЯ ПЕЧЕНИ У БОЛЬНЫХ С ИБС НА ФОНЕ БАЗИСНОЙ ТЕРАПИИ В СОЧЕТАНИИ ЭКСТРАКТА РАСТОРОПШИ. *Интернаука*, (4-1), 34-36.
20. Djalilova, S., Sadikova, S., & Salayeva, M. (2021). Assessment Of The Incidence Of Psycho-Emotional Disorders In The General Somatic Hospital.
21. Ergashov Nodirbek Shermukhamat ugli, Musaeva Mukharram Abdurashid kizi, Turbanova Umida Valiyevna, Boltaboyev Xikmat Qudrat o'gli, & Sultonova Dilbar Azamat qizi. (2022). Unnecessary Antibiotic Use: A Questionnaire on Assessing The Compatibility of Knowledge And Practice Among Students. *Neo Science Peer Reviewed Journal*, 3, 39-44. Retrieved from <https://neojournals.com/index.php/nsprj/article/view/39>
22. Мирзаева, Г. П., Жаббаров, О. О., Аликулов, И. Т., Бувамухамедова, Н. Т., & Рахматов, А. М. (2022). Особенности течения подагрического поражения почек у больных с ожирением.
23. Бувамухамедова, Н., Жаббаров, О., Мирзаева, Г., & Рахматов, А. (2022). Перспективы Применения Ривароксабана В Лечении Пациентов С Хронической Ишемической Болезнью Сердца.
24. Parpibaeva, D. A., Buvamukhamedova, N. T., Ergashev, N. S., Salimova, N. D., & Salaeva, M. S. (2023). Optimization of Functional State of the Liver in Patients with Chd on the Background of Rosuvastatin Intake. *Scholastic: Journal of Natural and Medical Education*, 2(4), 8-12.
25. Buvamukhamedova, N. T., Jabbarov, O. O., Mirzayeva, G. F., & Madazimova, D. K. (2021). PROSPECTS OF RIVAROXABAN USE IN THE TREATMENT OF PATIENTS WITH CHRONIC ISCHEMIC HEART DISEASE. *Oriental renaissance: Innovative, educational, natural and social sciences*, 1(11), 496-502.
26. Ayupovna, P. D., Saidabdullayevna, S. M., Djurabaevna, S. N., Shermuxamat o'g'li, E. N., & Taxirovna, B. N. (2023). FENOFIBRATE IN THE COMPLEX TREATMENT OF COMPLICATIONS OF TYPE 2 DIABETIC RETINOPATHY. *Spectrum Journal of Innovation, Reforms and Development*, 15, 1-8.