Academicia Globe:
Inderscience Research

ISSN: 2776-1010 Volume 4, Issue 4, April, 2023

THERAPEUTIC PHYSICAL CULTURE FOR OSTEOCHONDROSIS OF THE SPINE

Yakubova Guyokhon Kuchkarovna
Senior Lecturer of the Department "Theories and
Methods of Physical Culture"

Shaikhislomova Muqaddas,
4th Grade Student of Physical Culture

ANNOTATION

The article discusses the specific features of diseases of the musculoskeletal system and ways to improve the state of the body through exercise therapy. The symptoms of diseases, the causes of their occurrence, statistics on the number of people with a particular musculoskeletal disease by country are given. The essence of exercise therapy is also revealed, the benefits and specifics of exercise therapy for diseases of the musculoskeletal system are described, a number of exercises are given that will improve the physical condition of the patient.

Therapeutic exercise is the most common procedure included in almost every spa treatment program. It is a set of methodically designed and specially selected physical exercises. Doctors and instructors of the sanatorium "Belokurikha" use special sets of exercises that help get rid of diseases of the musculoskeletal system, nervous system and other body systems.

Osteochondrosis of the spine is a disease based on degeneration of the intervertebral disc with subsequent involvement of adjacent vertebrae in the process of the body, as well as changes in the intervertebral joints and ligamentous apparatus. Clinical manifestations of osteochondrosis are diverse and depend on the localization of pathological changes in various parts of the spine. Comprehensive treatment of osteochondrosis consists of orthopedic, medical and physiotherapeutic methods, with the mandatory inclusion of such exercise therapy tools as therapeutic exercises, natural factors of nature and massage.

General tasks of exercise therapy for osteochondrosis:

1. Reducing pathological proprioceptive impulses from the affected spine by increasing the distance between individual vertebral segments.
2. Improvement of metabolic processes by enhancing blood and lymph circulation in the affected segment of the spine and the affected limb.
3. Reduction of edema in the tissues located in the region of the intervertebral foramen.
4. Restoration of normal range of motion in the limbs and spine as the pain syndrome decreases.
5. Increasing the tone and strength of the muscles of the trunk and limbs.
6. Increasing physical performance and strengthening the body.

Therapeutic exercise for osteochondrosis of the cervical spine Cervical osteochondrosis is a degenerative-dystrophic lesion of the intervertebral disc in the cervical spine. According to its symptoms, cervical osteochondrosis is somewhat different from osteochondrosis of other departments, which is explained by the peculiarities of the anatomical structure of the spine in this area. Clinically, it

ISSN: 2776-1010 Volume 4, Issue 4, April, 2023

is manifested by pain in the neck, neck, shoulder, arm; weakness in the muscles of the arms, difficulty moving the head, crunching in the neck when turning or bending; burning sensation or pain between the shoulder blades; headaches, weakness and increased fatigue. Cervical osteochondrosis can also cause hearing and vision impairment, pain in the hands, heart and lung disorders, dizziness, nausea, double vision, facial numbness.

Exercise therapy is contraindicated with an increase in symptoms of impaired cerebral circulation, intense pain during an exacerbation of osteochondrosis, fever, and with severe compression of the neurovascular elements of the neck by an intervertebral hernia or bone outgrowths (in this case, surgical intervention is necessary).

Particular tasks of exercise therapy for a number of syndromes of cervical osteochondrosis:

• with humeroscapular periarthrosis: reduction of pain in the shoulder joint and upper limb, restoration of normal range of motion in the joints;

• with posterior cervical sympathetic syndrome (vertebral artery syndrome): prevention or mitigation of vestibular disorders;

• in discogenic ischemic myelopathy: strengthening weakened muscles and combating spastic manifestations of the disease.

With cervical osteochondrosis, exercise therapy is prescribed already in the acute period of the disease. However, active movements in the cervical spine are excluded from the LH complex, since they can lead to narrowing of the intervertebral foramens, compression of nerve and vascular formations. During the entire course of treatment, due to the mobility of the cervical vertebrae, the patient is recommended to wear a cotton-gauze collar of the Shants type, which prevents microtraumatization of the affected area and reduces pathological impulses.

LH classes include physical exercises for small and medium muscle groups and joints, exercises for relaxing the muscles of the shoulder girdle and upper limbs, swing movements of the upper limb. All exercises are performed from the starting positions lying down and sitting on a chair. From the first LH procedures, exercises are introduced to strengthen the muscles of the neck. To do this, use resistance exercises. For example, a doctor or instructor tries to tilt the patient's head forward, left, right, back with his palm, the latter, resisting, seeks to maintain the vertical position of the head. By the end of the course of treatment, the patient performs such exercises independently. To strengthen the muscles of the neck, exercises to hold the head are also used. At the beginning of the course of treatment, the patient in the initial position lying on his back is asked to slightly raise his head from the couch and try to keep it in this position for 2–5 s. This exercise can be done lying on your back, on your stomach, on your side. In the future, isometric tension of the muscles of the neck and shoulder girdle should be performed while standing against the wall and pressing on it with the back of the head for 3–5 s, followed by muscle relaxation. As the pain syndrome subsides, exercises are introduced into the exercises aimed at strengthening the muscles of the shoulder girdle and upper limbs (static and dynamic), which alternate with breathing and relaxation exercises. If the patient has disorders of the vestibular apparatus, exercises are added to coordinate movements, to develop spatial representation and balance. Active movements in the cervical spine are introduced only on the 15-20th day of classes.

Academicia Globe:
Inderscience Research

ISSN: 2776-1010 Volume 4, Issue 4, April, 2023

They are performed at a slow pace without effort with a small number of repetitions (up to 3 times), in the initial position lying on your back. Movements should be calm, painless, not cause discomfort. The course of exercise therapy includes 30–0 LG procedures. Along with LH, a therapeutic massage of the collar zone and upper limbs is prescribed up to 12-15 procedures.

At home, patients are advised to sleep on a semi-rigid bed, placing a small pillow under their heads. For the duration of long-term work associated with tilting the head, a trip by transport, it is necessary to wear a Shants collar. Be sure to perform physical exercises aimed at strengthening the muscles of the neck and shoulder girdle. In order to prevent exacerbations of the disease, it is necessary to regularly practice in the pool: swimming on the back, swimming in the breaststroke style, as well as repeat massage courses.

Therapeutic exercise for osteochondrosis of the thoracic spine

As a result of degenerative-dystrophic processes in the intervertebral discs in the thoracic spine, either an increase in thoracic kyphosis or its flattening can occur. Changes in the thoracic spine are manifested by pain, decreased chest excursion, hypotrophy of the respiratory muscles, impaired respiratory function, and a compensatory increase in lumbar lordosis. Particular tasks of exercise therapy for osteochondrosis of the thoracic spine:

1. Restoration of normal physiological curves of the spine.
2. Increasing the mobility of the chest and strengthening the respiratory muscles.
3. Normalization of the function of external respiration. Exercise therapy is started when the pain syndrome subsides. The LH complex includes dynamic and static exercises for all muscle groups, which alternate with breathing exercises and relaxation. When performing exercises, the starting positions are used: lying on the back, side, stomach and standing on all fours, the latter contributes to the extension of the upper and middle parts of the thoracic spine. When flattening the thoracic kyphosis, exercises are used to strengthen the abdominal muscles and stretch the long muscles of the back and spine, which will contribute to the formation of kyphosis. With increased thoracic kyphosis, exercises are used to strengthen the back muscles and stretch the long muscles of the back and abdominals. In LH, exercises for extension of the spine and thoracic region, reduction of the shoulder blades, as well as extension of the spine with simultaneous extension (hanging on the gymnastic wall, stretching the spine on an inclined plane, etc.) are widely used. When performing extension exercises, it is necessary to ensure that the spine is extended , as far as possible, only in the thoracic region, and not in the lumbar region. In order to avoid extension in the lumbar region in the initial position lying on the stomach, a cotton-gauze roller can be placed under the lower back. The course of LH is 30-40 procedures. When the pain subsides, a massage of the muscles of the back and chest is performed. Particular attention is paid to paravertebral points and interosseous spaces of the thoracic spine. Water exercises, breaststroke and backstroke are also recommended. At home, the patient is recommended to sleep on a hard bed, engage in LH, swim, and receive repeated massage courses. During the day, change the position of the body several times, rest, leaning back in a chair for 2–3 minutes, and walk. You can perform isometric tension of the back muscles (sitting on a chair, press the shoulder blades and lower back on the back of

ISSN: 2776-1010 Volume 4, Issue 4, April, 2023

the chair; putting your hands on the chair, put pressure on it). Standing with your back against the wall, apply pressure on it alternately with the gluteal muscles, lower back, and shoulder blades. After that, you need to completely relax and rest, the number of repetitions of one exercise should not exceed more than 4-5 times in one session.

For the prevention and treatment of diseases of the musculoskeletal system, Lilia Vladimirovna recommends such a set of exercises. They need to be performed lying on your back:

1. Lying on your back, arms along the body, pull socks towards you and away from you (10 times).
2. Alternately pull one sock towards you, the other - away from you (10 times).
3. Feet wider than shoulders, turn the socks in and out, hold for 5-7 seconds (5-10 times).

4. Feet wider than shoulders, turn both socks in turn to the right and to the left, hold for 5-7 seconds (4-10 times).
5. Circular movements in the ankle joint, clockwise and counterclockwise (4-10 times).
6. Hands along the body. Pull the right heel down, then the left, stretch from the hip for 5-7 seconds (4-8 times).
7. Hands along the body. Pull both heels down, fix 5-7 seconds (4-8 times).
8. "Bicycle", bend the legs - unbend in the knee joint forward and backward (up to 100 times).
9. Pull the socks towards you, fix 5-7 seconds (4-8 times).
10. Raise the right leg at 45 degrees with respect to the floor for 5-7 seconds, then the same with the left (4-8 times).
11. Straighten the legs, pull the knee joints to the chest (10 times). The exercise is aimed at strengthening the abdominal muscles, the load goes to the rectus abdominis.
12. Bend your legs at the knee joints, feet on the floor, arms along the body. Raise the pelvis on the exhale and hold for 5-7 seconds (4-8 times). When performing this exercise, squeeze the hips and pull everything in.
13. Bend your legs at the knee joints, feet on the floor, arms along the body. We raise the pelvis and stretch the leg forward at the level of our knee joint, and the toe towards ourselves. Hold for 5-7 seconds on each leg (4-8 times).

Academicia Globe:
Inderscience Research

ISSN: 2776-1010 Volume 4, Issue 4, April, 2023

14. Bend your legs at the knee joints, feet on the floor, shoulder width apart. We turn the right knee inward and hold for 5-10 seconds, arms to the sides, palms pressed to the floor, then repeat the same with the left (5-10 times).
15. Hands to the sides, palms pressed to the floor. Knee joints to the chest, tilt to the right and hold for 5-10 seconds, then to the left (4-10 times).

16. Straighten the legs, arms along the body. Emphasis on the heels, back of the head and shoulder blades. Raise the pelvis up and hold for 5-7 seconds (10 times).

Literature

1. Ashurali, T., & Javlonbek, M. (2022). METHODS OF CONDUCTING CHILDREN'S SPORTS GAMES. Conferencea, 30-34.
2. Oripjonova, R., & Tuychiyev, A. (2022). THEORETICAL FOUNDATIONS OF PHYSICAL EDUCATION AND SPORTS TRAINING IN WOMEN'S HEALTH PROMOTION. THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD, 1(1), 106-110.

ISSN: 2776-1010 Volume 4, Issue 4, April, 2023

3. Ashurali, T., & Aziz, U. (2022). GENERAL LAWS AND CHARACTERISTICS OF GROWTH AND DEVELOPMENT OF CHILDREN AND ADOLESCENTS. Academicia Globe: Inderscience Research, 3(11), 84-91.
4. Tuychiyev Ashurali, & Khairullayev Farrukh. (2023). THE BASICS OF BUILDING A TRAINING SESSION FOR YOUNG ATHLETES. Conferencea, 55–65. Retrieved from
5. Tuychiev Ashurali Ibragimovich. (2023). EXPERIMENTAL AND SEARCH WORK ON THE IMPLEMENTATION OF GAME TECHNOLOGY IN THE SYSTEM OF SUMMER RECREATION.
6. Tuychiyeva I., Hokimjonova M., Muqimova D. KOUCHING TEXNOLOGIYASI PEDAGOGIK KOMPETENTSIYANI OSHIRISH SHAKLI SIFATIDA //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – T. 2. – №. 12. – C. 1160-1165.
7. Tuychiyeva I., Jo'Rayeva S. OLIY TA'LIM SIFATINI OSHIRISHDA KREDIT-MODUL TIZIMINING AHAMIYATI //Science and innovation. – 2022. – T. 1. – №. B7. – C. 1349-1354.
8. Akmal, K., & Azizbek, M. (2023). Formation of Children's Sports Development System in Rural Areas. Eurasian Journal of Learning and Academic Teaching, 16, 79-83.
9. Косимов, А. (2022). Level of physical development of 13-15 year old students who are involved in swimming and school physical education. Общество и инновации, 3(4/S), 190-194.
10. Tuychieva I. ЎҚУВЧИЛАРДА ҲАЁТИЙ КЎНИКМАЛАРНИ ШАКЛЛАНТИРИШНИНГ ИЖТИМОИЙ-ПЕДАГОГИК ЗАРУРИЯТИ //Science and innovation. – 2022. – T. 1. – №. B7. – C. 278-287.
11. Bobojonov, N., Qosimov, A., & Abdubannopov, M. (2022, June). AGE-SPECIFIC CHARACTERISTICS OF PHYSICAL TRAINING OF COLLEGE STUDENTS. In E Conference Zone (pp. 64-67).
12. Akmal, K. (2022). Health Promotion of Children of School Age with the Help of Physical Education on the Basis of State of Health. Eurasian Scientific Herald, 9, 126-130.
13. Yakubova, G. (2021). Pedagogical valeology in the educational process of students of secondary educational institutions. Asian Journal of Multidimensional Research, 10(8), 199-204.
14. Yakubova, G. K. (2022). Pedagogical Factors Of Forming Youth's Healthy Lifestyle Through Physical Education. Journal of Positive School Psychology, 6(10), 2016-2020.
15. Якубова, Г. (2022, November). ЖИСМОНИЙ МАДАНИЯТ ВА СПОРТ МАШҒУЛОТЛАРИ ВАҚТИДА ОВҚАТЛАНИШ. In E Conference Zone (pp. 53-66).
16. Yakubova, G. (2021). Sports Medicine and Therapeutic Physical Education. Texas Journal of Multidisciplinary Studies, 2, 135-141.
17. Yakubova, G., & Alijonova, M. (2022). NAFAS OLISH ORGANI KASALLIKLARI HAQIDA TUSHUNCHALAR VA UNDA DJT.
18. Qochqorovna, Y. G. (2022). YURAK QON-TOMIR KASALLIKLARINI DAVOLASH JISMONIY TARBIYASI. Galaxy International Interdisciplinary Research Journal, 10(9), 80-81.
19. Guyokhan, Y. (2022). Analysis of Movements During the Day. Eurasian Medical Research Periodical, 12, 49-52.

ISSN: 2776-1010 Volume 4, Issue 4, April, 2023

20. Guyokhon, Y., & Mahliyo, A. (2022). O'SMIR YOSHDAGI BOLALAR NAFAS OLISH ORGANI KASALLIKLARINI JISMONIY TARBIYA VOSITALARI BILAN DAVOLASH. Spectrum Journal of Innovation, Reforms and Development, 8, 63-72.
21. Yuldashev, M., & Yakubova, G. (2022, October). ADAPTIV JISMONIY TARBIYADA QAYTA TIKLANISH (REABILITATSIYA). In E Conference Zone (pp. 14-17).
22. Guyokhon, Y. (2022, November). INFLUENCE OF METABOLIC THERAPY ON THE FUNCTIONAL STATE OF ATHLETES. In E Conference Zone (pp. 24-33).
23. Kuchkarovna, Y. G. Y. (2022). Bolalarda Bronxid Kasalligini Davolash Jismoniy Tarbiyasi. Periodica Journal of Modern Philosophy, Social Sciences and Humanities, 4, 1-4.
24. Yakubova, G. K. (2021). MONITORING OF PHYSICAL EDUCATION CLASSES IN CONDITIONS OF HYPERTHERMIA. Herald pedagogiki. Nauka i Praktyka, 1(2).