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PHYSICAL REHABILITATION FOR OSTEOCHONDROSIS OF THE CERVICAL SPINE IN MIDDLE-AGED WOMEN

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Degenerative-dystrophic lesions of the spinal motion segments are one of the most common diseases in the world. The problem with this disease is that a large part of the working-age population aged 35 to 55 suffers from it. Various pathologies of the spine and joints have become a «popular» diagnosis among neurologists at outpatient appointments. The process of osteochondrosis is based on the destruction of the vertebral disc with the transfer of negative processes to the bodies of adjacent vertebrae, intervertebral joints and ligamentous apparatus. Moreover, each segment of the spinal column as a result of this disease is characterized by its own peculiarities and localization. The main factor in the development of osteochondrosis of the human spinal column is dystrophic changes in the intervertebral disc. Currently, there are several theories explaining the cause of this disease: involutinal, hormonal, vascular, infectious, mechanical, abnormal, functional. Moreover, none of them fully discloses the causes of this disease [2].

The problem of treating osteochondrosis of the cervical spine is complex. In the course of rehabilitation, both medications and physical means are used. In the study, special attention was paid to the latter: breathing exercises, physiotherapy exercises and self-massage. An integrated approach to the choice of means and methods of physical rehabilitation contributes to obtaining a more effective recovery result for those suffering from cervical osteochondrosis.

In this regard, the aim of the study was to develop the structure and content of physical rehabilitation in osteochondrosis of the cervical spine.

To achieve this goal, it was necessary, in our opinion, to solve the following tasks:

1. To consider educational and methodological literature on issues related to the anatomical and physiological characteristics of the spinal column, causes, mechanisms of occurrence, clinical manifestations of osteochondrosis of the cervical spine, means and methods of recovery in this pathology.

2. To define diagnostic tests to identify the functional and motor state of the neck muscles in osteochondrosis of the cervical spine and to determine the painful sense of touch.

3. Experimentally prove the effectiveness of the developed rehabilitation classes aimed at eliminating functional and motor disorders in osteochondrosis of the cervical spine.

Materials and research methods. The course of osteochondrosis of the cervical spine occurs in two periods — acute and subacute. All physical rehabilitation exercises in the acute period are strictly contraindicated, since this period is characterized by severe pain, increased muscle tone, and hyperthermia. After the removal of the inflammatory process caused by this disease, the victim with cervical osteochondrosis «goes» into the subacute period, in which it is necessary to start a complex of rehabilitation measures. In this regard, we have developed rehabilitation classes for those suffering from osteochondrosis of the cervical spine in the subacute period. Classes lasting 40-50 minutes were held 3 times a week for 4 months. The structure of the developed lessons included preparatory, main and final parts.

Here is the structure and content of physical rehabilitation classes for cervical osteochondrosis in the subacute period.

Introductory part (5 min); consists of a complex of general developmental exercises and various types of walking.

The main part of the lesson (duration - 20 minutes) began with breathing exercises (10 minutes) in order to activate the flow of blood to all organs and to include in the work of all parts of the body to influence the spine from the inside. Breathing exercises eliminate the compression of the vertebral arteries that supply blood to the spinal cord, and the sympathetic nerve trunks that go along with the vessels, as a result of which the pain symptom disappears and the edema stops

squeezing the roots of the spinal nerves, thereby restoring the sensitivity of organs and tissues [3, 4]. Then the main part included specially selected exercises (10 min) aimed at strengthening and stretching the neck muscles, improving the mobility of the spine in the cervical and thoracic regions and the upper limb girdle, and restoring vestibular function.

In the final part (5 minutes), self-massage was used, which was replaced by slow walking while maintaining the correct posture. Self-massage was carried out for 3-5 minutes on the back of the head and neck in order to relieve tension after the completed set of exercises. Movements were performed from top to bottom, light stroking was applied, rubbing with fingertips.

To assess the effectiveness of the developed physical rehabilitation classes before and after the pedagogical experiment, we conducted functional-motor tests to identify the level of the neck muscles condition and quantitatively assess the painful sense of touch of people who took part in the experiment (using a verbal descriptive scale) [1].

The experiment involved 14 women aged 38-54 years, suffering from osteochondrosis of the cervical spine. In accordance with the given test tasks, the level of the condition of the neck muscles in the subjects. In all subjects who took part in the experiment, the course of the disease corresponds to the subacute period. This stage is characterized by the absence of inflammation in the affected spine, but there are movement restrictions and pain symptoms persist. All participants in the study underwent physical rehabilitation for osteochondrosis of the cervical spine for six months. A distinctive feature of the developed classes was that the main part of the classes included the complexes of breathing exercises developed by A.N. Strelnikova, and specially selected exercises aimed at strengthening and stretching the neck muscles, improving. After a formative experiment, which was a rehabilitation session, six women had a high level of neck muscles condition (no one had shown such a level before the start of rehabilitation measures); eight subjects had an average level of condition. It is important to note that after the experiment, none of

the women who took part in the study experienced any deterioration in their functional state [1, 5].

Conclusion. Thus, the results of a comparative analysis experimentally prove the effectiveness of an integrated approach in physical rehabilitation of osteochondrosis of the cervical spine.

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