

INCREASING SPINAL MOBILITY IN CHILDREN WITH SCOLIOSIS AGED 14-16

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Norboev Ahmad Hamro ugli**Keywords:** types of scoliosis, scoliosis, vertebral disc, physical exercise, treatment of scoliosis levels.

Abstract: In our civilized society, the majority of children live without leaving their homes. One of the reasons for spinal curvature is improper nutrition, and they do not know how to walk, stand, sit correctly, and are deprived of full physical activity. We are talking about the so-called television generation of schoolchildren. From the very first day at school, the child's spine is exposed to a heavy load. Limited physical activity, improper physical training, uncomfortable equipment (furniture), lack of proper posture etiquette - all this leads to deterioration of the musculoskeletal system.

Scoliosis is a lateral tilt of the spine in the frontal direction. When the edema of the ribs at this stage changes in appearance and shape with the appearance of a tubercle on the side and back, it is called kyphoscoliosis.

Scoliosis can be simple or partial with a single lateral curvature and complex - curvature of the arch facing in all directions and, ultimately, total, if the curvature covers the entire spine. It can be marked and unmarked, and it can be lost in the correct state. Along with scoliosis, its thorax appears, i.e., it rotates near the vertical axis, while the vertebral muscles rotate outward, and the ostic branches rotate inward. The thorium causes deformation and asymmetry of the rib cage, during which internal organs are compressed and displaced.

Purpose of the study: to improve the functional state of the musculoskeletal system in children of secondary school age with scoliosis.

The object of the study: is the functional state of the musculoskeletal system of children of secondary school age with all spinal deviations in the forward direction.

The subject of the research: is the orientation of secondary school-age children with scoliosis towards strengthening the functional state of the musculoskeletal system by the method of physical recovery.

Scientific novelty: an effective exercise regimen has been determined, taking into account the functional status of all trainees.

The subject of the research and the proposed hypothesis made it possible to formulate the research objectives:

Based on the research objectives, the following tasks were set:

1. Determination of the physical load regime for children with functional and scoliotic deviations of individual loops of the musculoskeletal system.
2. Development of a set of exercises for the physical recovery of scoliotic spinal curvature in children.
3. Prove the presented set of physical exercises in practice.

The reliability of the research was ensured by a set of methods for collecting and analyzing data, clarifying and verifying the obtained data.

The practical significance of the work lies in the fact that the developed regime of physical loads allows for an effective increase in the functional indicators of the musculoskeletal system of children with scoliosis, which allows for the use of physical rehabilitation measures by specialists in polyclinics, rehabilitation centers, and boarding schools for children with musculoskeletal disorders.

A complex of physiotherapeutic exercises was used to increase the mobility of the spine.

- Anti-scoliosis exercises
- Yoga, stretching exercises
- Stabilization exercises.

Along with this, corsets were worn on children for proper support of the spine.

Along with exercises and therapeutic physical education, a complex of exercises was used to increase the strength of the back and abdominal muscles.

In physical education, it is also advisable to use a number of games that are interesting for children, among which the game "Cat and Cow" is of great importance.

Breathing exercises and swimming exercises should also be properly distributed weekly.

The hypothesis, which presented the need for experimental verification, was determined based on the expression of the tasks and goals.

The adaptive regime of physical recovery addresses the following issues: adapting children to new equipment, medical personnel, familiarization with other children, identifying functional states, and prescribing physical loads. Children, after measuring anthropolytic indicators, determining the movement of the spine, determining the vital capacity of the lungs, and measuring the amount of physical work capacity, were tested. After conducting classes, they were recommended a complex movement regimen, where they repeated 10-15 beats per minute, taking into account the heart rate of 105-125 beats per minute; in another complex, during the main part of the lessons, they repeated 15-20 beats per minute, taking into account the heart rate of 125-145 beats per minute.

The practical significance of this work lies in the following: scoliosis (curvature of the spine) subsequently leads to pain in the shoulders and disrupts posture. The main treatment is physical recovery, which includes special exercises, since they always have a favorable outcome, except in some cases, which require surgical intervention. Among the known methods of scoliosis treatment, the set of training sessions, taking into account the functional status of all participants, has not yet been clearly defined. This work will help experienced coaches, athletes, and specialists in physical culture and sports. The above gives us such an opportunity, that is, the search for functional conditions of children of secondary school age with a curved spine showed that physical recovery with a set of physical exercises is a very important task today.

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