Volume 3, Issue 5, May 2025 ISSN (E): 2938-3765

PRINCIPLES OF THE HEALTH APPROACH TO SPORTS ACTIVITIES FOR CHILDREN WITH LOCOMOTOR DISORDERS

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Abstract
The article is devoted to the differentiated regime of the training process and methods of rehabilitation for musculoskeletal disorders in young athletes by means of therapeutic physical training.

Keywords: Sport, rehabilitation, musculoskeletal apparatus, therapeutic physical culture, scoliosis, flatfoot.

Introduction

Today, the problem of musculoskeletal disorders (MOA) in children is relevant worldwide. The incidence of OD lesions has also increased among children involved in sports. Comprehensive diagnosis and rehabilitation of young athletes is one of the most important problems of children's sports medicine. The emergence of modern diagnostic equipment (CT-OP, stabilization, magnetic resonance imaging) and new approaches to restorative therapy for children with ODA disorders (various types of massage, post-isometric relaxation, manual therapy) create a need for monitoring the health status of athletes and corrective programs of rehabilitation for ODA diseases and injuries in young athletes.

Research objective:

Development of differentiated approaches to the training regime and scientific substantiation of the physical rehabilitation program for young athletes with ODA disorders.

Research objectives:

1. Assess the state of OD of athletes 8-14 years old, engaged in various sports.
2. Develop a program of physical rehabilitation for children with OD disorders who practice sports in the conditions of "Child - Youth Sports Schools" (DSC).
3. Evaluate the effectiveness of the program for preventing posture violations before and during sports activities, taking into account the differentiated approach of the training regime.
4. To identify the impact of the proposed rehabilitation program on the morpho-functional state dynamics of ODA.

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Materials and Methods:

The study involved 60 people with OD disorders aged 8 to 14 years, who practice sports in the period 2023-2025. «USC» in Tashkent. The main group (PO) consisted of 30 people, whose OD disorders were corrected by individual programs with elements of manual therapy. OG was divided into two age subgroups: younger (8-10 years) and middle (11-14 years). The control group (CG) consisted of 30 people who received a traditional complex of therapeutic gymnastics (CBT) and was also divided into 2 age subgroups: younger (8-10 years) and middle (11-14 years). The examination of children engaged in sports was carried out both according to general medical examination rules and with an in-depth examination and examination according to the existing pathology of OD. From 2023 to 2025, the state of OD was evaluated in young athletes of OG and KG. The results were published in the journal. Anamnestic analysis, clinical examination using visual inspection, palpation, manual diagnosis, somatometry were performed; the functional state of the movement apparatus was determined; Diagnostic equipment using X-ray, ultrasound examination of the spine, examination by optical computer tomography. The largest number in KG and OG were children, fencing 27.5% and 18.3%, respectively; 8.4 per cent and 18.3 per cent of children engaged in gymnastics; 17.7% and 14.4% - footballers, 16% and 10.6% artistic gymnasts; athletes - 4.7% and 8.6%; Different types of struggle - 9.5% and 6.7%; swimming - 6.4% and 4.8%; volleyball and basketball - 3.8% and 5.8%; table tennis equal to 3.8%; Academic crests equal to 1.9%, the Shashiti - chess players (13.5%) were only in OG. It is evident that in the experiment, the majority of children with ODA disorders were young athletes engaged in acyclic sports. In addition to somatoscopic, somatometric and functional evaluation of the ODA condition of young athletes, objective evaluation methods were used. Diagnosis of scoliotic disease, instability of cervical spine in young athletes confirmed by X-ray. 40% of athletes have a frontal posture violation, two-plane posture violations and scoliotic posture (scoliotic component) confirmed by computer optical tomography. Full medical examination, somatometry and functional study of spinal mobility, muscular endurance of the body muscles were carried out in both groups before the course of treatment and after its completion.

Adjustment of the training process: the loads were dosed taking into account the posture and age of the athlete. The inclusion in the training program of exercises aimed at strengthening the muscles of the back and press, helps to maintain a correct posture. Excessive stress on the spine was eliminated, especially in the age group 8-12 years, as this can contribute to deterioration of the body condition.

Alternating between static and dynamic exercises: for example, during a fight you can include stretching and stabilization exercises so that the muscles are not overstretched and the joints remain under control. During training, avoid static posture so that there is no excessive pressure on the spine.

For the treatment of athletes KG was used LG group method, according to the methodology developed for the correction of posture and scoliosis 1 degree. The duration of one session was 40 minutes, treatment course 12 procedures for 8 weeks. For children of OG individual LH was used, which was based on the principle of prior stretching of shortened muscles and relaxation of spastic, breathing exercises, exercises in post-isometric relaxation, and then move on to exercises for

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strengthening and stabilizing the spine, muscular corset, and also developing the correct motor stereotype. Duration of the course 35 minutes, treatment course 10 procedures within 2 weeks.

Conclusions:

1. The prevalence of OD violations among young athletes engaged in various sports is increasing. Thus, posture disorders in the frontal and sagittal planes are from 59 to 72.2%, scoliotic disease - from 6.7 to 12.5%, flatfoot - from 18.4 to 26.3%. Comprehensive diagnosis and rehabilitation of athletes is one of the most important problems of children's sports medicine.
2. The program of remedial treatment of ODA disorders includes: diagnostic monitoring, intensive correction system, stabilization and potentiation system and preventive measures system.
3. Under the influence of restorative treatment courses for young athletes with ODA disorders, pain syndrome was reduced in children aged 11-14 years by 29.3%. The somatometric characteristics (delta of pelvis, shoulder and lower extremities) in children 8-14 years old were improved compared with the control group with a high level of reliable differences.

References

1. Prevention of sports injuries: a memorial to coaches, athletes and medical workers/ G. M. Suburban [et al.]. - Minsk: RNCC sport, 2016. - 26 p.
2. Yasyukevich, A. S. Analysis of the level and structure of sports injuries in individual sports/ A. S. Yasyukevich, N. P. Gulevich, P. G. Muha// Applied sports science. - 2016. - 1(3). -C. 89-99.
3. V.N Sokrut, N.Y.Jabluansky. «Medical rehabilitation» Slavyansk - 2015.

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