

NEUROREHABILITATION OF MINOR INJURIES OF THE LUMBOSACRAL SPINE DEPARTMENT IN ATHLETES WITH THE USE OF APPLIED TRAINING SWIMMING FOR STRETCHING.

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Annotation. The most frequent injuries of the musculoskeletal system in athletes are so-called minor injuries: minor concussions, bruises, compressions, sprains, chronic microtrauma, degenerative dystrophic processes, etc. Most of these injuries are minor sports injuries or manifestations of overtraining that do not require specialized diagnosis and treatment. Minor injuries of the lumbosacral spine require special attention, since in the absence of adequate treatment they can lead to serious health problems for an athlete. The leading means of neurorehabilitation of minor injuries of the lumbosacral spine in athletes are traction therapy and physical therapy (exercise therapy).

Keywords: musculoskeletal system, minor injuries, bruising, compression, sprains, chronic microtrauma, degenerative dystrophic processes. athletes, physical therapy.

НЕЙРОРЕАБИЛИТАЦИЯ МАЛЫХ ПОВРЕЖДЕНИЙ ПОЯСНИЧНО-КРЕСТЦОВОГО ОТДЕЛА ПОЗВОНОЧНИКА У СПОРТСМЕНОВ С ИСПОЛЬЗОВАНИЕМ ПРИКЛАДНОГО ТРЕНИРОВОЧНОГО ПЛАВАНИЯ НА ВЫТЯЖЕНИЕ.

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Аннотация. Наиболее частыми повреждениями опорно-двигательного аппарата (ОДА) у спортсменов являются так называемые малые повреждения: не большие сотрясения, ушибы, компрессии, растяжения, хронические микротравмы, дегенеративно-дистрофические процессы и др. Большая часть из таких повреждений является незначительными спортивными травмами либо проявлениями перетренированности, не требующие специализированной диагностики и лечения. Малые повреждения пояснично-крестцового отдела позвоночника требуют особенного внимания, так как при отсутствии адекватного лечения могут приводить к серьёзным проблемам со здоровьем спортсмена. Ведущими средствами нейрореабилитации малых повреждений пояснично-крестцового отдела позвоночника у спортсменов являются тракционная терапия и лечебная физкультура (ЛФК).

Ключевые слова: опорно-двигательный аппарат, малые повреждения, ушиб, компрессия, растяжения, хронические микротравмы, дегенеративно дистрофические процессы. спортсмены, лечебная физкультура.

The purpose of this study is to test the method of applied training swimming for stretching as a complex method of neurorehabilitation of minor injuries of the lumbosacral spine in athletes.

Materials and methods. The testing was carried out during 2013-2023. The study involved 64 male and female athletes who are representatives of complex coordination sports (gymnastics, acrobatics like, rhythmic gymnastics, synchronized swimming) at the age of 10 to 18 years old with minor injuries in the lumbosacral spine. All recovered athletes were randomly divided into two subgroups, approximately equal in number, age and nature of the injuries sustained. Athletes of the first (control) subgroup received traditional rehabilitation treatment using physical therapy and underwater stretching. The second (experimental) subgroup of athletes was restored with the help of applied stretching training swimming.

Results and their discussion. In the course of the study, it was confirmed that with prolonged (more than 45 minutes) swimming in warm water, deep tendon-muscle relaxation occurs, leading to compensation of tendon-muscle contractures and vascular spasm, and normalization of microcirculation in tissues. With prolonged, more than 45 minutes, swimming in warm water and performing stretching exercises (sliding with a board, kolobashka), there is an increase in the intervertebral distance, decompression of the discs and spinal nerves, pain syndrome is stopped. We have developed special sets of exercises of applied swimming for stretching, which, like exercise therapy, carried out the formation of a muscular-ligament corset against the background of passive stretching of the spine (swimming on the chest and on the back with a board and / or a bun in flippers or without them). In the course of the study, it was shown that long-term applied traction swimming in warm water combines the advantages of exercise therapy and traction therapy (underwater traction). Recommended standard of appointments: 7-10 sessions of 45-90 minutes daily. Also effective conducting applied swimming 2-3 times a week for 2 weeks. In the course of the performed study, a significant difference was noted in the quality of rehabilitation measures carried out in control and experimental subgroups

(reduction of the time of complete recovery of athletes by 46%). It should be noted that the considered method of applied training swimming for stretching may have relative contraindications for cardiological and therapeutic diseases, which, as a rule, are absent in athletes.

Conclusion. The long-term experience of rehabilitation activities carried out in the period from 2013 to 2023 has shown the high effectiveness of applied traction training swimming as a method of neurorehabilitation of athletes with minor injuries of the lumbar spine. The leading role in carrying out such recovery is played by a sports medicine doctor, who, in addition to rehabilitation, must have the necessary knowledge in sports and applied swimming and in the theory of sports training. The load method of neurorehabilitation using applied stretching training swimming can be recommended to sports doctors of teams when planning and implementing rehabilitation measures with athletes who have minor injuries in the lumbar spine.

Literature

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