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ОРТОПЕДИЯЛЫҚ ГИМНАСТИКА ЖАЛПАҚ ТАБАН МЕН ТАБАННЫҢ ТІРЕК КҮМБЕЗІ АУРУЛАРЫНЫҢ АЛДЫН АЛУ РЕТІНДЕ

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Аңдатпа

Қозғалыс жетіспеушілігі адамның функцияналды жағдайына және жасөспірімнің болашағына теріс әсер етеді. Қозғалыстың организмге әсері өте маңызды: бұл басқа бұзылулардың дамуын қоздыратын "триггер механизмі", бұл өз кезегінде гипокинезияның әсерін күшейтеді. Қозғалыс адам организмнің дамуын қалыпқа келтіреді. Бұлшық еттің қызметі жасөспірім организмнің дамуының негізгі шарты. Баланың дамуы үшін маңызды, өмірге қажетті жағдай-сапалы, саналы қозғалыстың белсенділігі болып табылады. Білім мекемесінің стратегиялық мақсаты: ортаны қалыптастыру, денсаулық деңгейін қолдау, оны нығайту, салауатты өмір салтын дамыту, денсаулық мәдениетін тәрбиелеу, стреске деген тұрақтылықты бейтараптандыратын және төмендететін орта құру.

Түйінді сөздер: денсаулық; жалпақ табан; аурулар; профилактика; тірек-қимыл аппараты; табан күмбезі; табан деформациясы; жүру; шаршау; ортопедиялық гимнастика; жаттығулар; динамика; сауықтыру рәсімдері; өзі табанға массаж жасау; ағзаның жалпы шынығуы.

ОРТОПЕДИЧЕСКАЯ ГИМНАСТИКА КАК ПРОФИЛАКТИКА ПЛОСКОСТОПИЯ И БОЛЕЗНЕЙ ОПОРНОГО СВОДА СТОПЫ

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Аннотация

Двигательная недостаточность не только неблагоприятно влияет на функциональное состояние и здоровье растущего организма. Ее воздействие на организм оказывается более значительным: она – своеобразный «пусковой механизм», провоцирующий развитие других нарушений, которые в свою очередь усиливают влияние гипокинезии. Мышечная деятельность основное условие нормального возрастного развития ребенка. Одним из самых важных, жизненно необходимых условий формирования здорового организма является обеспечение в периоде роста и развития полноценной, достаточной по качественным и количественным показателям двигательной активности. Стратегической целью учреждений образования должно стать создание среды, которая способствует физическому и нравственному оздоровлению, поддержанию уровня имеющегося здоровья, его укреплению, формированию навыков здорового образа жизни, воспитанию культуры здоровья, нейтрализующей и снижающей стрессоустойчивость организма.

Ключевые слова: здоровье; плоскостопие; заболевание; профилактика; опорно-двигательный аппарат; свод стопы; деформация стоп; ходьба; утомляемость;

ортопедическая гимнастика; упражнения; динамика; оздоровительные процедуры; самомассаж стоп; общая закалка организма.

ORTHOPEDIC GYMNASTICS AS A PREVENTION OF FLAT FEET AND DISEASES OF FOOT ARCH

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Annotation

Motor impairment not only adversely affects the functional state and health of the growing organism, but also significantly affects the body: it is a kind of "trigger", provoking the development of other disorders, which in turn enhance the effect of hypokinesia. Muscular activity is the main condition for the normal development of a child. One of the most important, vital conditions for the formation of a healthy organism is the provision of complete, sufficient in terms of qualitative and quantitative indicators of physical activity during the growth and development of the organism. The strategic aim of educational institutions should be creation of environment that contributes to physical and moral recovery, maintaining the level of existing health, strengthening it, developing healthy lifestyle skills, raising a health culture that neutralizes and reduces the stress resistance of the body.

Key words: flat feet; disease; prevention; musculoskeletal system; foot arch; feet deformity; walking; fatigue; orthopedic gymnastics; exercises; dynamics; health treatments; self-massage of the feet; general body quenching.

Introduction

A number of studies conducted by American scientists have shown that there is a direct correlation between pain in the spine, leg joints and foot arch. Studies conducted by American scientists, led by Utah University Professor David Krier, have shown that there is a direct dependence between flat feet and the state of internal organs. Based on this, a person can be bothered by some diseases for many years. Drug treatment causes irreparable harm to organs and body systems. Although many diseases could be corrected by exercises (for example: flat feet is an insignificant disease, according to the opinion of many people).

The studies carried out in this direction and on this issue showed not comforting results, they consisted in the fact that more than two thirds of people living in the world received this disease (flat feet).

What is the disease - flat feet? The legs, and especially the feet, take on an incredibly heavy load with every step, especially if the walking surface is hard (for example, asphalt). To minimize the load, the feet have two arches - transverse and longitudinal. In the case of flattening of one or another foot arch, flat feet occur. It can be congenital and acquired. The cause of acquired flat feet can be overweight, pregnancy, improper selection of shoes, etc. [1].

The correct formation of the foot arches is facilitated by the training of the ligamentous apparatus and muscles. Such simple actions as walking on small pebbles or sand stimulate the awakening of muscles and bioactive points of the feet.

The problem of prevention and treatment of the health of preschool children has recently become particularly relevant. The reason for this is the large number of preschool children (84.9%) with a variety of health problems. Diseases associated with dysfunction

of the musculoskeletal system are becoming an especially acute problem, one of the first places among which takes flat feet. The children's foot continues to form until the age of 6, which is why it is easier to prevent feet deformity while the ossification points are not closed. It should be noted that if preventive and health-improving procedures are started in a timely manner, the deformation of the foot arch does not progress and this process can be corrected. That is why prevention in the early stages of flat feet plays an important role and deserves special attention [2].

Research methods

By the end of the day, children with flat feet may complain of rapid fatigue of the legs, pain in the feet, knees when running and walking for a long time. The appearance of headaches after motor loads is not excluded, which may be a consequence of a decrease in the spring function of the feet. In the lower legs, pain is localized in the calf or anterior tibial muscles. For those suffering from flat feet, a characteristic feature is a spanking gait with the socks spreading to the sides, while standing - the desire to put the foot on the outer edge, uneven wear of the shoe (the inner part is wearied out faster).

When carrying out orthopedic gymnastics, a prerequisite is a combination of general strengthening exercises and special ones. At the beginning, exercises are performed with unloading of the feet from the initial sitting and lying position, then exercises from the initial standing and walking position are added to the complex. To arouse interest in preschool children and raise their general emotional background, bright objects are used, and classes are conducted in the form of a game.

Special exercises for flat feet are exercises that help to strengthen the tibialis anterior muscle, extensor longus of toes, long extensor of 1 toe, short muscles of the feet, to increase the length of the triceps muscle of the leg, and form the foot arch. Effective exercises are also exercises with gripping and shifting small objects, rolling objects, walking on a stick, hoop, ribbed board, treadmill, walking on toes, on heels, on the outside of the foot [3].

On the basis of the “Ivushka” nursery-kindergarten, which is located in Petropavlovsk, Kazakhstan, North Kazakhstan region, a physical education instructor conducted a statistical study, which revealed that of 294 children (100%), 46 children (16%) have a pronounced form of flat feet. This statistical study prompted orthopedic gymnastics to be carried out on the basis of a nursery-kindergarten for the prevention of flat feet and diseases of the foot arch.

Research results

To work with children with deviations, a set of special exercises was compiled, which gave a positive trend. Before performing the main set of exercises, self-massage of the feet was carried out in order to warm up and prepare for physical activity. The entire foot and the phalanges of the toes as a whole were covered.

A set of exercises for self-massage (sitting on a chair)

Longitudinal rubbing of the feet, moving them back and forth along the massage mat simultaneously and alternately.

Circular rubbing of the feet, moving them in a circle, moving the load from the heel to the toes along the outer arch simultaneously and alternately.

Cross rubbing of the feet, moving them to the sides and to the center. It is performed simultaneously with both legs.

Gripping the mat nap with your toes and holding for a few seconds.

Gripping the mat nap with your toes and trying to supine the feet without releasing the nap.

Gripping the mat nap with your toes and trying to spread the feet (tear the massage mat) without releasing the nap.

A set of exercises for orthopedic gymnastics

Sitting on the floor:

The starting position is an emphasis from the back while sitting. Legs are straight. Alternate lifting of straight legs with simultaneous dorsiflexion of the feet and holding for 4-6 seconds.

The starting position is an emphasis from the back while sitting. Legs are straight. Small ball's rolling with each foot.

The starting position is an emphasis from the back while sitting. Spreading legs to the sides and putting on heels, bringing legs together and putting on toes.

In a standing position:

Rise on toes;

Rise on heels;

Half-squat on toes.

In the walk:

Walking on toes;

Walking on heels;

Walking on the outside of the foot;

Walking on a ribbed board;

Walking on an incline;

Walking on a trail.

Sitting on a chair:

"Fishing". A ribbon with a fish on the other end is tied to a gymnastic stick, rolling the stick with a full foot we gradually pull the fish towards us.

"Peas" (exercise with the usage of non-standard equipment). A sheet of paper with the image of multi-colored peas lies in front of the child, lids of different colors lie in a container nearby, working only with his toes, the child grabs the lid and transfers it to a pea of the corresponding color.

"Legs draw". Grasping a pencil with his toes, the child needs to draw a picture on the sheet in front of him.

"Hedgehog". Rolling a massage ball with a full foot of the left and right legs alternately.

After using this set of exercises, significant results were achieved.

In addition to a set of exercises, games were held to prevent flat feet. The purpose of these games is to strengthen the entire ligamentous-muscular apparatus of the foot and lower leg against the background of the development and strengthening of the child's body. At the end of the gymnastics, a track mat with different fillers was used, which act on the bioactive points located on the foot.

The proposed elements (exercises) of corrective gymnastics can be used in various forms of physical culture and health-improving work, both in specially organized activities and in independent motor activity. In the kindergarten, on the basis of which the research took place, this type of gymnastics was carried out 2 times a week, in the morning.

Conclusion

Orthopedic gymnastics has its own characteristics. In order to achieve the desired effect from gymnastics, it must be done methodically and regularly. All exercises should be done carefully, at a slow pace, until slight fatigue appears. All exercises are

recommended to be performed with bare feet. It must be remembered that an adult is an active participant and assistant in orthopedic gymnastics. The duration of such gymnastics was usually 20-25 minutes. At the end, procedures for general hardening of the body were carried out.

References:

1. Yu. I. Krupenkina, V.N. Chernova. Physical development and health status of Voriginsk secondary school children. // Children, 24 sports, health: an interregional collection of scientific works on problems of integrative and sports anthropology. - Smolensk: SGAFKST, 2011. - Pp. 117-119.
2. T.Yu. Kartashova, S.A. Polievsky. Diagnosis of flat feet in 5-6-years-old children. // Collection of scientific works of young scientists and students of the Russian State University of Physical Culture. - Moscow: AstraPress, 2003. - Pp. 167-170.
3. Physiotherapy exercises for diseases in childhood. / Edited by S.M. Ivanova. - Moscow: Medicine, 1975. - 120 p.