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PHYSICAL DEVELOPMENT OF GIRLS IN THE FIRST PERIOD OF CHILDHOOD

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✓ ***Resume***

One of the most important tasks in the world is to determine the anthropometric indicators of the physical development of girls of different ages involved in rhythmic gymnastics, to ensure their health by eliminating and preventing its deviations and developmental disorders. In this regard, the World Medical Association (WMA) states: "…If the sports participant is a child or teenager, the physician should first of all pay attention to the stage of growth and development of the participant…" emphasizes the participation of doctors in sports medicine. This suggests that the determination of morphometric parameters of the body in young girls and the determination of their relationship with indicators of physical development is one of the important problematic issues in medicine of national importance.

Key words: physical development, anthropometric parameters, rhythmic gymnastics, body height, body weight.

ФИЗИЧЕСКОЕ РАЗВИТИЕ ДЕВОЧЕК ПЕРВОГО ПЕРИОДА ДЕТСТВА

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✓ ***Резюме***

Одной из важнейших задач в мире является определение антропометрических показателей физического развития девочек разного возраста, занимающихся художественной гимнастикой, обеспечение их здоровья путем устранения и профилактики его отклонений и нарушений развития. В связи с этим Всемирная медицинская ассоциация (WMA) заявляет: «…Если спортивным участником является ребенок или подросток, врач должен в первую очередь обратить внимание на стадию роста и развития участника…» подчеркивает участие врачей в спортивной медицине. Это говорит о том, что определение морфометрических параметров тела у девушек раннего возраста и определение их связи с показателями физического развития является одним из важных проблемных вопросов медицины государственного значения.

Ключевые слова: физическое развитие, антропометрические показатели, художественная гимнастика, рост, масса тела.

БОЛАЛИКНИНГ БИРИНЧИ ДАВРИДАГИ ҚИЗЛАРНИНГ ЖИСМОНИЙ РИВОЖЛАНИШИ

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Дунёда турли ёшдаги бадиий гимнастика билан шуғулланувчи қизлар жисмоний ривожланишининг антропометрик кўрсаткичларини аниқлаш, унинг меъёр чегарасидан оғишларини ва организм ривожланишидаги бузилишларни бартараф этиш ҳамда олдини олиш орқали улар саломатлигини таъминлаш муҳим вазифалардан бири ҳисобланади. Шу муносабат билан Жаҳон Тиббиёт Ассоциацияси (WMA): «…спорт иштирокчиси бола ёки

ўсмир бўлса, шифокор биринчи навбатда иштирокчининг ўсиши ва ривожланиш босқичига эътибор бериши керак…» дея шифокорларни спорт тиббиётига жалб этилишини таъкидлайди. Бу эса ёш қизларда тана морфометрик параметрларини аниқлаш ва уларни жисмоний ривожланиш кўрсаткичлари билан боғликлигини аниқлаш давлат аҳамиятига эга бўлган тиббиётнинг муҳим муаммоли масалаларидан бири эканлигини кўрсатади.

Калит сўзлар: жисмоний ривожланиш, антропометрик кўрсаткичлар, бадиий гимнастика, бўй, тана вазни.

Relevance

Body length, body weight and chest circumference are the main morphometric indicators of physical development. These indicators are one of the most informative criteria for assessing the growth and development status of children [3].

Body length and weight are the leading indicators of physical development. Body length reflects the developmental processes of growth and the level of physical maturity. Body weight, in contrast to body length, varies greatly, since it can change rapidly under the influence of a number of endogenous and exogenous factors [2,6].

The study of changes in these indicators makes it possible to assess the dynamics of the growth process [4].

Children's morbidity should be compared separately with body length, weight and chest circumference, rather than with a comprehensive assessment of their physical development, which assesses the level of physical development of a child based on health indicators. A comprehensive assessment of physical development is compared with individual forms of acute or chronic disease and a conclusion is made as an indicator of health relative to the indicator [7].

Determining changes in the status of physical development of children is one of the most relevant areas of human ecology, which changes from generation to generation. The study of anthropometric features of physical development is a method of adaptation of an organism to the environment [1].

Anthropometry, which helps to assess the characteristics and condition of the human body, is actively used in medicine today. The variability in human body size has created a great demand for anthropometric research. An important goal of anthropometric methods is to determine the characteristics of human development. Physical health assessment is carried out by carrying out individual calculations and comparing their results with generally accepted normative indicators of the development of the human body [5,8].

Purpose of the study. To study the anthropometric changes in the body parts of girls involved in rhythmic gymnastics, and to make a comparative comparison with the anthropometric indicators of girls who do not go in for sports of the same age.

Methods and materials

Anthropometric indicators N.H. Shamirzaev, S.A. Ten and me. It was studied using the anthropometric research method recommended by Tukhtanazarova (1998). The following instruments were used for measurement: medical scales, height gauge and measuring tape.

The research was carried out on the basis of the Children and Youth Sports School in Gymnastics in Bukhara, secondary school No. 7 and preschool institution No. 16.

Results and discussion

According to the study, 5-year-old girls involved in rhythmic gymnastics had a height of 94.4 cm to 120.1 cm in an upright position, with an average height of 104.4 ± 1.79 cm and a height of 37.2 cm to 64 cm in sitting position, ranged from 8 cm to an average of 46.8 ± 1.93 cm. Body weight ranged from 13.0 kg to 22.0 kg, an average of 16.8 ± 0.63 kg.

In 6-year-old girls doing rhythmic gymnastics, the average height was from 101.4 cm to 118.3 cm, the average was 109.8 ± 1.01 cm, and the measured position was from 36.8 cm to 55.3 cm, the average - 47.2 ± 1.1 cm. The body weight of athletes of this age ranged from 15.0 to 22.0 kg, on average 18.4 ± 0.42 kg (Fig. 1).

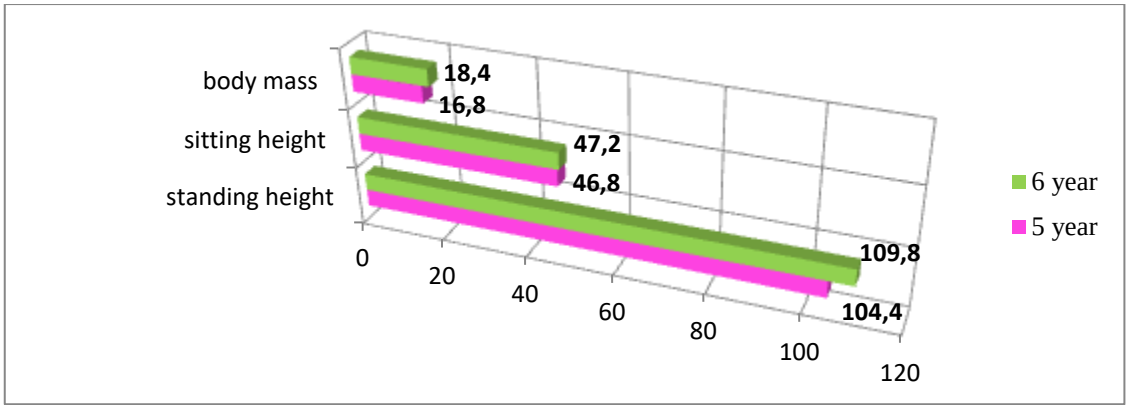

Figure 1. Indicators of physical growth of girls in rhythmic gymnastics

In 5-year-old girls who did not do rhythmic gymnastics, their height ranged from 96.5 cm to 112 cm in an upright position, on average 104.9 ± 0.93 cm, and in a sitting position - from 44 cm to 60.4 cm, 9 ± 0.98 cm. Body weight ranged from 14 kg to 22.1 kg, on average 16.7 ± 0.49 kg.

The same indicator was obtained for girls 6 years old, not involved in sports, from 108.1 cm to 127.3 cm in a standing position, on average 114.9 ± 1.23 cm and from 50.4 cm to 66.8 cm in sitting position, on average 56.9 ± 1.04 cm. In girls of this age, body weight ranged from 17.1 kg to 25.1 kg, on average 20.3 ± 0.5 kg (Fig. 2).

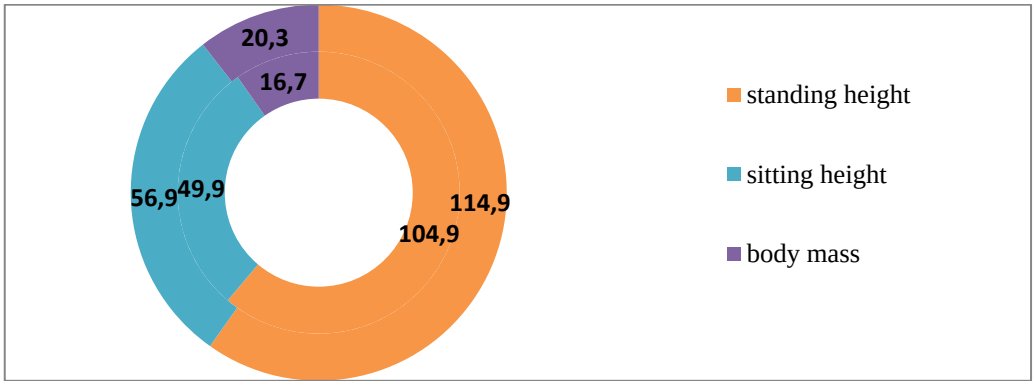

Figure 2. Girls who are not involved in rhythmic gymnastics are indicators of physical growth.

In 5-year-old gymnasts, the chest circumference at rest ranged from 49.2 to 57.1 cm, on average 54.1 ± 0.55 cm. With deep breathing, this indicator ranged from 51.2 cm to 61.3 cm, in average 56.1 ± 0.7 cm. During deep exhalation, the chest circumference ranged from 46.2 to 58.4 cm, on average 50.0 ± 0.85 cm.

In 6-year-old girls involved in sports, the chest circumference at rest ranged from 53.0 to 59.0 cm, on average 56.5 ± 0.36 cm. With deep breathing, it ranges from 55.2 to 64.1 cm, on average 58.9 ± 0.54 cm. With deep exhalation, the chest circumference ranged from 51.0 to 60.1 cm, on average 55.2 ± 0.54 cm.

In 5-year-old girls who were not involved in gymnastics, the chest circumference at rest ranged from 50.2 to 55.1 cm, on average 53.3 ± 0.3 cm. With deep breathing, this indicator ranged from 51.1 to 58, 1 cm, on average 55.3 ± 0.42 cm. During deep exhalation, the chest circumference ranged from 50.2 to 53.1 cm, on average 51.4 ± 0.17 cm.

For 6-year-old girls who are not involved in gymnastics, the chest circumference at rest ranges from 50.1 cm to 60.1 cm, on average 53.4 ± 0.64 cm. With deep breathing, it ranges from 51.2 to 63.1 cm, on average 55.6 ± 0.76 cm. During deep exhalation, the chest circumference ranged from 46.3 to 59.1 cm, on average 51.5 ± 0.82 cm.

Conclusion

The results of the study showed that this group of girls involved in rhythmic gymnastics lags behind healthy peers in terms of body length and weight. Changes in their chest circumference size are proportional to their body weight. Such a body constitution of gymnasts depends on the frequency of physical activity, taking into account the requirements of gymnastic exercises, which in this regard allows optimizing the most suitable exercise process, as well as developing specific approaches to the correction of hormonal disorders in female athletes.

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