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Anthropometric Indicators of Physical Development of Boys and Girls with Adenoids

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Abstract:
Under the influence of the environment, the transformation of the development of the organism in growth develops, which reflects the physical development. The morphometry of physical development is reflected in the indicators of anthropometry, physiognometry and data of functional activity. Height, weight and chest circumference are the main anthropometric parameters of physical development of children at certain stages of ontogenesis.
Key words: anthropomertia, children, adenoid hypertrophy, physical development

Introduction

Objective: to analyze the parameters of physical development of children aged 3-11 years and children with adenoid hypertrophy

Materials and methods: The study was carried out on the basis of the ENT department of the Bukhara Oblast Children's Hospital. The number of children before and after adenotomy surgery was 348 (181 boys and 167 girls). Accordingly, in children with adenoid hypertrophy and 6 months after surgery, body length was measured with a height gauge, body weight with special medical scales, and chest circumference with a measuring tape. During the same periods, a survey of parents was conducted on a 10-point scale to assess the overall children's condition (Table 1).

The subject of the study was the anthropometric parameters of the head and face. In the course of scientific research, a set of methods was used, depending on the tasks set: anthropometric, morphometric, statistical methods.

Introduction. Changes and generalization of morphofunctional traits depending on the environmental conditions of physical development are indicators of their genetic factors [112, p. 139-145; 117, pp. 275-282]. As a result, the latter changes in the process of physical development in a positive or negative direction [45, p. 566-567; 84, p. (in Russian). 204-204a].

According to N.N. Rudenko and I.Y. Melnikov (2010), one of the informative criteria of children's health, which characterize this dynamic process, determines the development of the child in the physical plane [77, p. 121-123].

Centile tables are the main and widespread methods for determining the harmony of children's physical development [20, p. 73–79], which are based on measurements of anthropometric parameters of a large number of children under study and indicate the average values of the parameters of weight, height, circumference of the chest cavity and head, which in turn makes it possible to compare the rates of growth and growth of the individual development of the child [112, p. 139-145].

There are separate tables for male and female children. Head circumference is assessed only up to the first year of children's life, and already in preschool and school age, height, body weight and chest circumference are considered important indicators [21, p. 73-79; 26, p. (in Russian). 86-100].

With the help of mathematical formulas for the body mass index method, it is possible to characterize the development of the physical state by the ratio of individual anthropometric parameters [24, p. 165-166; 115, p. (in Russian). 91-101.].

At present, despite the standardization of research, the search for the most informative methods, there is still no accurate assessment of indicators of physical development [26, p. 86-100; 54, p. (in Russian). 59-64; 117, p. (in Russian). 275-282; 119, p. (in Russian). 578-583].

The study of the peculiarities of health formation helps in the study of the physical development of a large number of children and adolescents [26, p. 86-100].

The results of basic morphometric measurements are used as standards for assessing physical development [110, p. 10-15; 118, c. 280-283].

According to the WHO, there are uniform international norms (standards and standards) that characterize the physical development of children [26, p. 86-100].

In the development of a child, the causes of various health deviations are improper nutrition, environmental factors, pathologies, genetics, and ethnicity [51, p. 49-54; 74, pp. 257-260; 113, pp. 27-28; 114, c. 845-854].

In studies on physical development, under the age of 5 years, under favorable living conditions of children, the same rates of growth in height and body weight were revealed, and when comparing the results of these data with the help of centile tables, the same increase in parameters was shown [3, p. 68-73; 9, p. 23; 59, p. (in Russian). 27-31; 83, c. 2; 93, c. 12-19].

Results of the study. In this chapter, we present the results of anthropometric parameters of children with pharyngeal tonsil hypertrophy of both sexes aged 3-11 years. All the data obtained are described in the age aspect, in this regard, the description of the parameters begins at the age of 3.

In boys at the age of 3 years, the average height was 87.8±0.30 cm, in girls it was equal to an average of 91.5±0.20 cm. The weight of boys on average was 12.9±0.10 kg, in girls it was an average of 13.6±0.01 kg. The average chest circumference (paused) of children is 47.8±0.20 cm and 48.6±0 cm. 40 cm respectively.

In 4-year-old male children, the average height was 97.6±0.50 cm, in females it was equal to an average of 95.8±0.40 cm. The average body weight was 14.7±0.10 kg for boys, and 14.7±0.10 kg for girls±. In females, the average was 52.0±0.20 cm.

According to the study of 5-year-old boys, the average height was 105.2±0.30 cm, in girls it was on average 105.3±0.10 cm. In males, the weight was on average 15.8±0.10 kg, in females it was an average of 16.7±0.10 kg±±.

Based on the results of the study, it can be noted that the average height of 6-year-old male children was 111.8±0.40 cm, and the average height of girls was 111.2±0.20 cm. Body weight in male children was on average 18.9±0.40 kg, and in girls it was on average 19.0±0.10 kg±. 21 cm, in the female sex it was equal to an average of 55.4±0.10 cm.

As a result of the research, it turned out that the height of 7-year-old male children was on average 121.7±0.30 cm, and that of females was 121.6±0.20 cm. Body weight in boys was on average 21.7±0.30 kg, in girls on

average - 21.4±0.20 kg±. ±Studies have shown that 8-year-old males had an average height of 125.5±0.312 cm, and females had an average height of 125.4±0.30 cm. The average weight of boys was 25.3±0.26 kg and the average chest circumference during the pause was 62.4±0. 31 cm, and in girls the average was 24.3±0.20 kg and the average chest circumference in the pause was an average of 59.2±0.20 cm, respectively.

The treated data showed that the average height of 9-year-old male children was 132.1±0.33 cm, and that of females was 130.3±0.30 cm. In boys, the average body weight was 26.9±0.28 kg, and in girls it was 27.0±0.30 kg±. 20 cm, for women it was 62.4±0.20 cm on average.

Table 3.4 Resource requirements

Anthropometric indicators of physical development of children with adenoids (cm)

Age		Growth	Body Weight	Chest circumference in pause
3 – Flight		83,2 - 91,9 87,8 ±0,3	12,1 - 13,7 12,9 ±0,1	45,5-49,8 47,8±0,2
		88,2 - 93,8 91,5 ±0,2	13,1 - 14,2 13,6 ±0,0	44,3-53,5 48,6±0,4
4 – Flight		90,8 - 102,4 97,6 ±0,5*	13,1 - 16,0 14,7 ±0,1*	47,2-53,2 50,9±0,2*
		90,9 - 101,6 95,8 ±0,4*	13,8 - 15,5 14,7 ±0,1*	50,3-54,5 52,0±0,2*
5 – Flight		100,7- 109,2	13,7 - 17,6 15,8 ±0,2*	51,0-53,9 52,4±0,1*

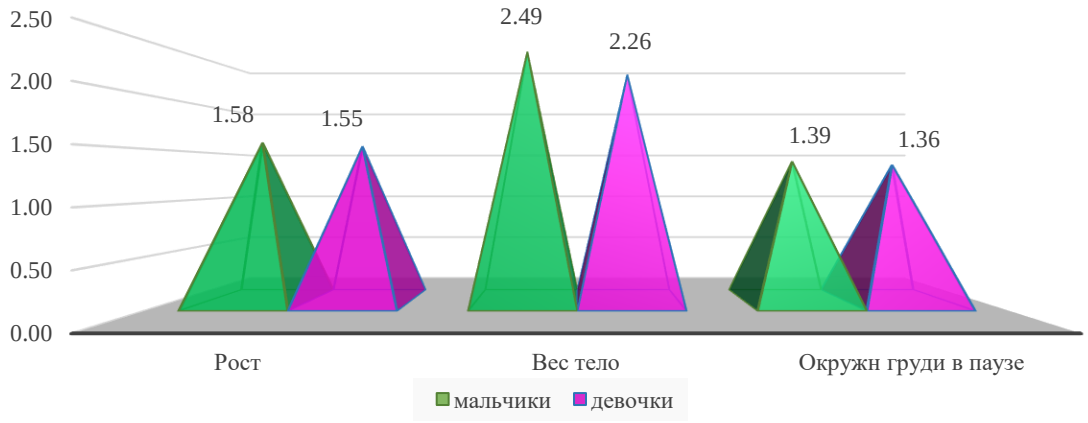
		105,2±0,3*		
		103,5-106,8 105,3±0,1*	15,9-17,8 16,7±0,1*	52,6-55,4 53,9±0,1*
6 – Flight		108,3-118,9 111,8±0,4*	14,1-22,9 18,9±0,4*	55,0-60,4 57,7±0,2*
		108,5-113,4 111,2±0,2*	17,8-20,6 19,0±0,1*	53,6-56,9 55,4±0,1*
7 – Flight		118,3-125,2 121,7±0,3*	17,8-24,2 21,7±0,3*	58,7-65,5 62,1±0,3*
		119,5-123,4 121,6±0,2*	19,5-23,8 21,4±0,2*	56,3-61,0 58,3±0,2*
8 – Flight		120,5-128,3	22,1-28,7 25,3±0,26*	58,4-66,1 62,4±0,3*

		125,2±0,31*		
		121,9-129,6 125,4±0,3*	21,8-26,9 24,3±0,2*	57,1-61,7 59,2±0,2*
9 – Flight		128,1-136,3 132,1±0,32*	23,1-30 26,8±0,27*	60,6-65,7 63,6±0,2*
		126,3-132,9 130,3±0,3*	23,5-29,8 27,0±0,3*	59,8-65,6 62,4±0,2*
10 – flight		132,6-139,3 136,0±0,27*	27,7-31,4 29,5±0,15*	63,1-67,7 65,40±0,18*
		132,7-143,6 137,2±0,44*	26,7-33,3 30,3±0,26*	60,8-67,4 64,4±0,26*
11 – flight		134,1-142,8	27,8-34,8 32,20±0,28*	63,7-69,2 66,60±0,22*

		139,0±0,35*		
		137,2-144,7 141,5±0,30*	26,-35,7 30,8±0,39*	63,0-69,7 66,1±0,27*

Note: * is the confidence score (P<0.05) compared to previous age.

Figure 3.4



Drawing. 3.4. Comparative analysis of physical development of children aged 3-11 years with adenoids depending on gender

Based on the results of the study, the average height of 10-year-old boys was 136.0±0.27 cm, the average height of girls was 137.2±0.44 cm, the average weight was 29.5±0.15 kg and 30.3±0.26 kg, respectively. The indicators of breast circumference during the pause in male children were equal to the average – 65.4±0.18 cm, In females, the average was 64.4±0.26 cm.

It was revealed that in 11-year-old male children, the average height was 139.0±0.35 cm, in females it was equal to an average of 141.5±0.30 cm, and the body weight was 32.2±0.28 kg and 30.8±0.39 kg, respectively. In boys, the chest circumference was 66.6±0.22 cm on average, and in girls it was 66.1±0 cm on average. see (Table 3.4).

Thus, in children with adenoids, virtually all parameters of children's physical development differed significantly from the previous age and gradually increased (p>0.05). In male children, the growth rate of chest circumference, length and body weight of boys increased by 1.39, 1.58 and 2.49 times, respectively. In female children, the growth rate of physical development parameters (chest circumference, height, weight) increased by 1.36, 1.55 and 2.26 times, respectively.

The rate of increase in body length in 8-year-old boys was 2.15%, which was also noted in 11-year-old girls, respectively, is 3.04%. The increase in body weight in both sexes was 5.89% (9-year-old boys) and 1.64% (11-year-old girls) compared to 3-year-olds, and the increase in chest circumference was equal to 0.49% and 1.51% respectively in boys and 8-year-old girls

References

1. Hamidovich, J. A., & Ahadovich, S. A. (2022). Assessment of Quality of Life During Orthopedic Treatment of Patients with Diseases of the Mucosa of the Oral Cavity. Texas Journal of Medical Science, 8, 96-100.
2. Ilyasov, A. S., & Alimova, N. P. (2022). Anthropometric indicators of physical development of boys and girls in bukhara region. British Medical Journal, 2(4).
3. Jumaev, A. A., & Eshpulatov, A. (2023). Analysis of caries intensity in an elderly people in bukhara. Conferencea, 42-44.
4. Jumayev, A. H. (2023). Keksa bemorlarda olinadigan protezlarga moslashishi. O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali, 2(17), 178-188.
5. Jumayev, A. K., & Eshpolatov, A. (2023). Adaptation to prosthetics that can be obtained in older patients. Open Access Repository, 4(3), 1199-1210.
6. Khamidovich, J. A., & Akhadovich, S. A. (2022). Сравнительная оценка адентии зубных рядов верних и нижней челюстей у пожилого населения. Journal of biomedicine andpractice, 7(3).
7. Pulatovna, A. N., Muzaffarovn, K. S., & Radjabovich, B. R. (2023). Results of anthropometric studies of the maxillofacial region of children with hypertrophy of the adenoids. Open Access Repository, 4(3), 1183-1194.
8. 3Zhumaev, A. K. (2020). Of partial defects of the dental rows of dynamic study of the state of the mucosa of the oral cavity in the new conditions of functioning. International Journal on Integrated Education, 3(12), 61-63.
9. Zhumaev, A. K. (2020). Partial defects of dental rows results of the questionnaire and clinical assessment of the condition of removable prostheses. Middle European Scientific Bulletin, 6, 94-97.
10. Radjabov, A. B., & Khasanova, D. A. (2018). Innovative and traditional approaches to learning of students in the department of anatomy and clinical anatomy of bukhara state medical institute. Вестник Международного Университета Кыргызстана, (3), 180-182.
11. Раджабов, А. Б., Ражабов, А. А., Темирова, Н. Р., & Хасанова, Д. А. (2017). Сравнительный анализ первичной хейлопластики у детей с двухсторонней расщелиной верхней губы и нёба с учётом степени недоразвития срединного фрагмента. Биология и интегративная медицина, (11), 27-38.
12. Раджабов, А. Б., Темирова, Н. Р., Камалова, Ш. М., & Раджабов, А. А. (2018). Возрастная анатомия лимфоидных структур ободочной кишки крысы и ее изменения при воздействии цимбуша. Вестник Кыргызско-Российского Славянского университета, 18(9), 138-140.
13. Раджабов, А. Б., & Тухсанова, Н. Э. (2008). Возрастная анатомия и микроскопическое строение ободочной кишки крысы и ее изменения при воздействии цимбуша. Морфология, 133(2), 111b-111b.
14. Раджабов, А. Б., Ражабов, А. А., Хасанова, Д. А., & Темирова, Н. Р. (2017). Микроскопическое строение лимфоидных образований ободочной кишки крысы и её изменения при воздействии циперметрина. Биология и интегративная медицина, (11), 5-13.
15. Раджабов, А. Б., & Тухсанова, Н. Э. (2008). Возрастная анатомия и микроскопическое строение ободочной кишки крысы и ее изменения при воздействии цимбуша. Морфология, 133(2), 111b-111b.
16. Раджабов, А. Б. (1997). Реактивные изменения стенки ободочной кишки крыс 21-дневного возраста при отравлении цимбушем. Российские морфологические ведомости, (2-3), 116-118.

17. Раджабов, А. Б., Темурова, Н. Р., & Ашуров, К. Э. (2021). Сосудистое микроциркуляторное проявление щитовидной железы при диффузном токсическом зобе. Молодой ученый, (18), 77-79.
18. Radjabov, A. B. (2023). Microanatomy of the epithelial-stromal elements of the prostate in mature rats under chronic alcohol exposure. The role of science and innovation in the modern world, 2(6), 114-121.
19. Boltaevich, R. A. (2023). Structural Changes in the Prostate of Old Rats with Chronic Alcoholism. Journal of Coastal Life Medicine, 11, 1757-1764.
20. Radjabov, A. B. (2023). Morphology of the prostate in 6-month-old rats and its reactive changes in chronic alcoholism. International Journal of Medical Sciences And Clinical Research, 3(05), 46-52.
21. Radjabov, A. B. (2023). Structural Changes in the Prostate of 3-Month-Old Rats with Chronic Alcoholism. Central Asian Journal of Medical and Natural Science, 4(3), 329-332.
22. Radjabov, A. B. (2023). Comparative morphological characteristics of the prostate in juvenile rats and rats with chronic alcoholism. World bulletin of public health, 22, 60-65.
23. Boltaevich, r. A. (2022). Динамики роста весового показателя тела и анатомических параметров простаты крыс-самцов на протяжении постнатального онтогенеза. Journal of biomedicine and practice, 7(2).
24. Boltaevich, R. A. (2022). Growth dynamics of the body weight index and anatomical parameters of the prostate of male rats during postnatal ontogenesis. ACADEMICIA: An International Multidisciplinary Research Journal, 12(6), 154-158.
25. Раджабов, а. Б. Динамика развития органометрических параметров предстательной железы детей в постнатальном онтогенезе. T [a_XW [i [S US S_S^[ůe YfcS^, 62.
26. Radjabov, A. (2021, November). Dynamics of the development of organometric parameters of the prostate gland in children in postnatal ontogenesis. In International Scientific and Current Research Conferences (pp. 55-58).
27. Раджабов, А. Б., & Ражабов, А. А. Проблемы адаптации студентов первого курса медицинского вуза к учебной деятельности. In «современное состояние, проблемы и перспективы медицинского образования» международная учебно-научно-практическая конференция «тиббий таълимнинг замонавий холати (p. 185).
28. Muzafarovna, K. S., Radjabovich, B. R., & Joraboy, S. (2022). Morphometric Parameters of the Trunk in Children with Scoliosis. Central asian journal of medical and natural sciences, 3(3), 144-147.
29. Камалова, Ш. М., Тешаев, Ш. Ж., & Хамидова, Н. К. (2020). Параметры физического развития 8-летних детей в норме и при сколиозе. Морфология, 157(2-3), 92-93.