

**ANATOMO-PHYSIOLOGICAL CHARACTERISTICS OF CHILDREN'S INTERNAL
ORGANS AND SYSTEMS (AFX)**

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Abstract: Children's bodies undergo significant developmental changes as they grow from infancy to adolescence. These changes are reflected in the anatomical and physiological characteristics of their internal organs and systems. Understanding these characteristics is crucial for healthcare professionals, educators, and parents to provide appropriate care and support for children's overall well-being. This article delves into the various anatomical and physiological characteristics of children.

Keywords: Periods, age, womb, growth, formation, general condition, physical development.

Introduction: Children's body grows and develops constantly based on certain laws. A child goes through certain periods in the process of growing up. Each period is defined by specific anatomico-physiological characteristics of the child, which together affect the reactive properties and resistance of the child's body.

This, in turn, leads to the passing of a certain disease and a specific course of pathological processes in children of different ages. In pediatrics, the scheme of childhood periods proposed by N.P. Gundobin was adopted for practical convenience. Accordingly, childhood is divided into the following periods:

I. The period of development of the child in the mother's womb from fertilization to birth (9 calendar months, 10 obstetric months, 39-40 weeks or 270-280 days) lasts:

- a) Embryonic period (embryo) - the first 3 months of pregnancy;
- b) Placental period (fetus) period after 3 months.

II. Infancy period.

III. Infant period (young age).

IV. Milk teeth period:

- a) The period before preschool age - (adult age);
- b) Preschool age - (attend kindergarten) period.

V. Adolescence (junior school age).

VI. Puberty (high school age).

It is necessary to dwell on the information that needs to be taken into account in each of the above periods. The period of development of the child in the mother's womb includes the period from the time when the fertilized egg is implanted in the uterine wall until the child is born. The most fragile period of this period is the embryonic period, the formation of the child's organs and tissues and the development of the placenta correspond to this period.

During this period, the mother falls ill with various acute and especially viral diseases, faces various physical and mental shocks, which causes birth defects in the child. In the placental period, the child begins to be supplied with blood directly through the placenta.

Therefore, the development and growth of the child directly depends on the general condition of the mother. Any mother's disease and pathological conditions can have an impact on the child and can derail its further development.

As a result of the weakening of the barrier (protective) ability of the placenta, the child is born with various congenital somatic and infectious diseases. The period of infancy lasts from the day of birth to 28 days, that is, 3-4 weeks, and according to national traditions, it lasts up to 40 days (chillak period).

The height, weight and chest circumference of boys are superior to those of girls until the age of 11, and by the age of 11, these measurements are equal to each other, and then until the age of 15, the superiority of girls becomes noticeable. After the age of 15-16, boys maintain a constant advantage.

There are many factors affecting the physical development of children, including external environmental factors (daily routine, nutrition, walks, physical education and sports, training, etc.) and various diseases (especially congenital heart defects, central nervous congenital and acquired diseases of the nervous system, endocrinopathies and diseases) can have a negative effect.

Anthropometric measurements are carried out to correctly assess the physical development of children. In most cases, these measurements are carried out by a nurse, and their correct determination ensures that accurate conclusions can be drawn about the child's development (conducting these measurements is described in the practical part of the textbook).

Weight, height, chest and head circumference of children under 2 years old are measured in polyclinics, as in infants. It is also necessary to take into account that the growth and development of children and adolescents is accelerating. The process of acceleration is characterized by the acceleration of physical and sexual development and is reflected in:

1. The fact that my baby is born bigger;
2. Early eruption of milk teeth;
3. Increasing weight and height of children at all ages;
4. Increasing size of the head, chest and other dimensions;
5. My girl starts menstruating early and boys go through puberty early;
6. Early appearance of ossification nuclei in boys and girls.

In short, Monitoring and continuous assessment of children's physical development is one of the main tasks of a direct medical nurse, and it is required to inform the doctor of any identified deficiencies and ensure that appropriate measures are taken.

The special anatomico-physiological characteristics of the children's body and the need for special factors in the healthy growth, development and care of the child were the main impetus for the emergence of the science of pediatrics. Children are not a small copy of adults, but an organism that grows and develops, that is, matures every month and year. The morphological immaturity of the body, organs and tissues of organs also causes peculiarities in their physiological characteristics.

Based on this, it is impossible not to take these morphological and physiological characteristics into account when monitoring the development of children, caring for them, feeding them, controlling the course of diseases, organizing treatment and other activities.

However, despite the fact that the child's organism is still immature and in the process of development, it is characterized by its resistance and vitality to the negative effects of the external environment compared to adults. Some serious pathological conditions that occur in a child's life may not be borne by most adults.

And on the contrary, pathological conditions, which are considered to be simple in appearance, can make the condition of the child worse or become the cause of his death. Taking this into account, relevant information about the anatomo-physiological characteristics of the child's body is presented below.

AFX of the skin, subcutaneous fat and mucous membranes:

The skin performs the following functions that are extremely important in the body performs:

- the organism from various external mechanical, chemical and biological effects storage;
- participation in breathing;
- participation in metabolism;
- participation in maintaining body temperature;
- acting as a sense organ;
- Participation in the formation of vitamin D.

The skin is complete when its functions are fully developed and matured but the younger is the child, the more deficiencies in performing the mentioned functions of the skin. Because they have anatomical and physiological characteristics of the skin typical of children.

Conclusion

Understanding the anatomical and physiological characteristics of children's internal organs and systems is essential for providing appropriate care and support for their overall well-being. By recognizing the unique characteristics of children's bodies, healthcare professionals, educators, and parents can ensure their optimal growth and development

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