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MORPHOLOGICAL, PHYSIOLOGICAL AND ANTHROPOMETRIC INDICATIONS OF THE ICYMANIC GLAND IN YOUNG CHILDREN (LITERATURE CONTRACT)

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Abstract
Today, one of the most important problems for researchers is the study of the morphology, physiology and pathology of the immune system, which is primarily associated with the demands of clinical medicine, given that new environmental, social and other factors have begun to significantly influence the human body. The thymus gland is the central organ of immunogenesis and the endocrine gland. The structure (macro-microscopic picture) of the thymus was studied on 31 corpses of newborn children. We used anatomical methods (preparation, measurement) and histological methods (histological stain). In the darker, cortical zone, the cells are located very densely, their number is much greater than in the center of the cerebral zone. In the thickness of the medulla, there are single Gassal's bodies, blood capillaries, and lymph gaps. The cortical layer consists of lymphoid elements, very densely located, with mitoses in individual cells. The thymus gland has a delicate thin connective tissue capsule, consisting mainly of elastic fibers, collagen fibers are revealed among the fibers, collagen fibers and interlobular septa are well developed in newborns.

Keywords: thymus gland, newborn, morphology, histology, structure.

1.1. Anatomical-physiological properties of the muscle gland in young children.
Thymus (Th or thymus) is located in the upper - front part of the intercut space, directly behind the floor, touching the front surface. In many hills (70-81.6%) the asymmetric length will consist of 2 bands wrapped in a capsule [108, 109].
The left part of the EU will be longer than the right in about 2/3 of the halls [47]. Its parts will be tightly or partially connected to each other, and in the middle - approach each other. To a lesser extent, the Thymus may consist of one, three or five parts [4, 7, 47, 119].
The front surface AB will be more even and the rear surface slightly inclined [111]. The intermediate position of the EU in the middle is found in many halls (91.2%), less often - in ratios below (5.6%) and above (3.2%) [4].

In people with wide chest cells, a diary, an intersection, if there is a narrow chest, can be located in a vertical hall and reach the diaphram of the huttoka [106, 119].

The upper ends of the EU usually reach a buffalo depth of. And in children, they can extend beyond the upper part of the corn gap, sometimes reaching the lower pole of the thyroid gland, and in some hills higher. Given this, parts of the neck and chest differ in the EU. The lateral part of Thymus is straight to the lower region of the pre-stracheal interfaction interval, and is also located behind the lobe and lobe-thyroid muscle [53, 108, 206]. The highest location of the side of AB at the point is observed only in newborns, that is, 1-2.5 cm above the chest. [4, 119].

Thymus lateral - the left and right mediastinal surfaces of the lungs stretched from the sides, partially covered with the left and right mediastinal sinuses of the pleura. The right and left borders of the EU extend beyond the scapular bone, 0.5-2 cm to the right and 1-2.5 cm to the left. In the projection passing through the front wall of the chest, the iron is located directly to the upper part of the interpleural field, and the age narrows, and the external boundaries change along the midline to the inside [4, 108, 119].

The lower borders of both EU bands reach 3-4 edges, young people over time rise up to 2-3 edges [119]. Anterior surface AB has posterior surface and upper part of blade body, as well as area of "triangle AB" (108, 111).

Trachea, upper pericardium, starting parts of aorta, light poa, aorta, left tree-head vein and top of ladle vein are located in the posterior part of thymus [108]. The lower surface of Thymus capsule touches the pericardium, moves away with age [119].

The Thymus capsule is located in the immediate vicinity of the area of organs and vessels covered with fatty fiber and targeted connective tissue. The upper AB strips are connected to the thyroid gland using thyroid-insimonic plaques, and at the bottom of this contact there are several branches of the lower thyroid artery, sometimes the lower thyroid glands [111].

Depending on the EU shape, mainly leaves (thymus-barg, lot.) Can have 68.8%, cylindrical - 9.6%, pyramidasimone (conussimon) - 7.2%, in smaller hills - tumor, oval or indeterminate forms [4]. Some authors note that there is an association with the identification of pathologies associated with the form of EU. For example, cylindrical Thymus is often observed in chronic diseases mainly during balogata, grade 2-3 dystrophies, sepsis, purulent pleurisy [80].

The shape of the EU strips mainly has a cone-shaped shape, the ends are sharp, the base is wide (the shape of a longitudinal cone) [4]. The ends of the rods are divided into two, similar to the shape of a fork with two teeth. In connection with this form, it was named [108]. Another name was also used according to the form, that is, "thyme" - from a word resembling a thyme leaf [119]. By now, both names are applied the same way.

The arrangement of the parts to each other can be variable. Based on the results of sectional inspection by V.Yu. Bosin (2014), there are 2 types in the EU structure: the first type - parts are connected to each other (in 97%); the second type - strips are located in a separate (3% in the hall) hall separated from each other [17]. Most often (60%) contact each other throughout development. Very rare (19%) occurs in the lateral part, and in 10% - only in the thoracic part. And in 8% of cases there are holates that are completely connected to each other [17].

EU dimensions and weight are not constant, change very quickly depending on age [65, 67, 153, 160, 184, 203, 206]. According to Matkovsky T.V. (2011), children under one year old can have a large number of variable indicators of length, width and thickness (80). The weight of Thymus is mass, in newborns 3.2 grams, that is, 20.0 grams can vary up to [80].

According to some scientists, sedentary growth, the development of the EU occurs before the first 3-year-old age of the child, the maximum mass of which is observed at the age of 2-4 years, and the absolute maximum mass during the balogating period develops from 25.0 grams to 40.0 grams, after which its mass decreases. [80, 121, 124, 123].

In some cases, especially developed EU strips are found at the bottom of the thyroid gland, in the pancreas, around the soft tissues of the neck, sometimes in the area of the gap between the posterior maize, usually calling them an additional or abberant thymus. The meeting interval of the abberant thymus is 25%, mainly in women between the left and left kuks. In these additional pathologies, the same changes occur as in the main EU [50, 56, 111, 112, 113, 119, 120, 121, 123].

Textile barriers pass from the flowing capsule of AB compartments, which divide parenchyma into 0.2-5mm buns and distinguish layers of pustak and magiza in each strip. The magic floors of one part can continue to the magic floor of other parts [2, 50, 56, 120, 121, 123].

The blood supply to the EU is explained by the large number of arterial vascular sources in young children. On average, 5-7 Thymus networks are provided by blood from arterial vessels: 3 upper injection arteries - lower thyroid arteries; 2 pairs of lateral-branched arteries - lines of the left and right internal thoracic arteries; pericardial-diaphragmatic artery, anterior thoracic artery, shoulder-head, aorta and abdominal arteries, as well as several separate arterial nodes [2, 15, 26, 56, 106, 111, 119, 123].

The blood supply to the EU also changes with age. Separate arterial networks, separated from the lower thyroid artery, are the main source of blood supply in children with feces. Blood supply to the EU in people over 20 years of age is mainly due to the pericardial-diaphragmatic artery [26]. The average diameter of arterial vessels Thymus during infancy and youth is 05, -1.0 mm, and in adults - 1.0-1.5 mm [26].

In the EU parenchyma, a densely sunny aretial species will form, with an age-related change in which, according to some authors, only a few arterial vessels are distinguished (V.D. Tikhomirova, 2011), according to other scientists (Shumeiko, 2014), the total volume of blood supply changes less often, sometimes less with obvious age-related changes can also remain unchanged.

The Vienna blood vessels of the EU are placed mainly in the internal thoracic veins, then in the left nameless vein, the left peronsimonic vein, the perkardiaphragmatic veins [2, 56, 111, 119, 103, 116]. Inserts of the EU venous system will have several options. The right and left turquoise veins are formed by several small peripheral veins, which then connect to each other, forming the main crowned EU vein, or by the author called the Keinis vein, and then delivered to the left vein. In addition, venous blood vessels can form randomly with each other, which can easily be applied to the left shoulder-cephalic vein and the superior oval vein [32].

Kendall-M. According to (2011), T lymphocytes, which are followers of bone sand, can be included in the internal tissue of AB through the subcapsular zone of the type of blood vessels, due to its thresholds of pustlac and magysis [99]. Blood vessels located in the desert layer AB have their basement membrane, and also have the functions of ensuring the connection of lymphocytes through this membrane [2, 50, 78].

On the layers of pustlac and magysis, the structure of the capillary will be different: on the layer, their basement membrane will be thicker, continuous, covered with dense epithelium; and on the magic floor, layers of endothelium and epithelium are located in a hall connected to each other, which is one of the features of the endocrine glands [50, 61, 69, 93].

All EU interband blood vessels will be confined to interband internal perivascular gaps - connective nodal connections to different cell populations. From individual plaques in the parenchyma of the intravenous perivascular spaces of the empty Thymus layer, they will be separated continuously by the basement membranes, and in these places the structural structure of the EC will be created - the geamto-timic barrier (GTB). The hematothymic barrier is an obstacle to circulating macromolecules or antigens in the blood, preventing their premature meeting with unsaturated thymocytes. There is no such barrier on the medulla floor - a barrier where formed T-lymphocytes gather [50, 121, 111, 123]. The hematothymic impermeability of the barrier can change under the influence of various factors, which ultimately can lead to an increase in lymphocyte forms not contained in the blood [50, 80, 114]. The EC lymphatic capillaries are located between the interband connecting barriers. For ABs, they are local lymph vessels, anterior flanks, down, and lymph nodes (50, 111].

Autonomic innervation of Thymus is carried out using the vessels of the neck and chest (sympathetic part), as well as diaphragmatic and scattered nerves (parasympathetic part) [50, 106, 111, 113]. Some authors believe that the role of the autonomic nervous system is little studied in the anatomy and physiology of the EU.

For example, management of the nervous system of the production of thymic hormones, migration of T-lymphocytes [2, 50, 56, 101, 102, 111, 113].

The EU will be available for all vertebrates. In humans, Thymus begins to develop beginning in the fourth week of fetal development, before other lymphatic and endocrine organs, in the form of two multi-layered epithelium as a long grass, develop through cracks of pairs III and IV (114).

Further larvae of development of the EU grow by the caudal party, are extended, get denser, approach with each other. The thin (proximal) site of the EU extended up receives the name a thymus-farengialny way then over time he disappears, and lower - a tolshchinny part form treeless cracks [2, 50, 105, 108, 114, 116, 118].

Development of the main structural structures of the EU will begin to be formed within 7-12 weeks of an embrogenez. Therefore this period of development is disappointed. During the fetal period intensive processes of a hematopoiesis in interalkaline barriers and intracellular perivaskulyarny gaps (HPV) can be observed [50, 74]. At the time of the birth the newborn is the full-scale member of the EU. It consists of large strips, a parenchyma which also differ in wider layer emptiness, than хатто, and a little narrow layer of a magiz [6, 42, 50, 74, 82, 94]. After the birth (up to 10 years) in the EU becomes thicker than an emptiness layer. On reaching 10-year age the sizes of layers of a pustlak and magiz will be comparable to old. At newborns and during this period of the EU his relative weight - the maximum weight is the largest lymphoid member, and [56, 76].

In the histologic relation in the EU 4 structurally functional zones differ: subkapsular, intercortical, medullary and interwheel internal perivaskular spaces [50]. As a part of Thymus there are difficult immune processes: T-lymphocytes are allocated, as a result of interaction rectilinear an epithelium and macrophages process of an autotolerentnost develops, the process called antigens I and II of classes of a system of histologic balance of HLA, and all this, timichesky hormones is formed, 1,2,3 and 4 can be observed at influence of interleukins and prostaglandins. In these dressing gowns on average 95% of T-lymphocytes can be met in apoptosis. This results from the fact that at T-lymphocytes the autoaggression is shown [29, 50, 96].

On the magic floor of AB Gassal's bodies - the dense, lying concentrated, changeable, strongly dense epithelial cells are located. Over time Gassal's coins will begin to collapse, and instead new will begin to develop. Children have 8-12 years their sizes and the sizes decrease in comparison with children of chest age (from 4-16 to 2-7) [48, 50, 69]. Gassalny bodies are the functional AB element which is ishitroky in a differentiation (comparison) of timotsit, possesses the glucocorticoids and receptors influencing adrenaline [109].

By means of the adapted epithelial cells, desmos in certain zones of the EU form "look" for the timotsit made during the different periods stroma of the EU perform functions [109]. Process of an expersiya can hold on the surface lymphocytes at adhesion of a molecule.

The functional activity of AB is explained by activity of its epithelial cellular structure [30, 109, 127].

The allocated lymphocytes can be allocated from structure of Thymus or, through free, efferent lymphatic capillaries, be removed in local lymph nodes, or by means of an ekstravazal way, through a wall of postkapilar faded, in a cortico-medular zone [127].

The full cellular structure of T-lymphocytes is updated each 4-6 days in the EU. In the EU the maximum quantity of timotsit is the share generally of day and evening, and in the morning and in the evening - no as at this time migration (migration, outflow) of lymphocytes from the EU is observed [72, 109].

Educated T-lymphocytes have markers: CD3, CD4, CD8, CD6, CD5, CD7, T-sR and also antigens 1- and 2 of the class HLA [50, 114].

Thus, Thymus is the limfoepitelialny member who is functionally connected with lymphocytes and an epithelium [2, 30, 50, 111, 123].

Is the central member of the immune system of the EU and treats a neuroendocrine system, that is epithelial cells of the EU make such means which provide further functional activity of lymphatic system and support her at the appropriate level [30, 57, 58, 97, 109, 121].

The EU makes a large number of a bilogicheska of active agents (about 40 types): 1) a tsitokinina (gamma interferon, interleukin, a factor of necrosis of plants, the granulotsitarny colonizing factor, etc.); 2) endocrine or timogenny hormones (thymozine, thymogen humoral factor, thymopoetine, tymoline, thymostimuline, thymogen factor of X, etc.) [1, 12, 16, 86, 91, 125].

Cages of a subkapsular zone produce timogene hormones of local influence, and medullary cages are remote fruits, for example, a timichesky bloodwhater factor. Hormones of the EU influence also process of formation of T-lymphocytes during certain periods of time [50, 55, 131].

In the process of performing its tasks, the EU will also influence a certain amount of the neuroendocrine system [58, 91]. During perinatal development, AB is under pituitary control, that is, using a reverse contact mechanism - adenohypophysis - somatotropic hormone (STG) - Thymus - T lymphocytes. Central to this system is somatotropic hormone (STH), which has a thymotropic effect. An increase in the amount of STH in the blood can lead to an increase in the EU. If AB is removed in experimental animals, an increase in the amount of STG can be observed [9, 55, 91, 107, 108, 109]. Functional rhythmic changes in the properties of thymulin, hormones of the pituitary-renal gland system correspond to changes in the functional rhythm [125, 129]. Steroid hormones facilitate the production of thymulin hormone, inhibit the synthesis of special antibodies, inhibit the migration of lymphocytes from the EU [122, 119, 111, 112]. After the excess exposure to glucocorticoids ceases, the EU is again enriched with lymphocytes, its structural structure is completely restored.

Thymectomy leads to activation of the activity of the renal gland, increases its weight, then decreases and continues with a clear decrease in the amount of cortisol [50, 56, 124, 127, 128]. When removing the renal bladder in the EU, hypertrophy is observed, the number of thymic factors increases, lymphocyte migration increases [50, 56, 121, 124, 129, 128]. Atrophy is observed in the EU when the thyroid gland is removed. With Ho Chi Minto and thyrotoxicosis, an increase in EU is observed [50, 51, 99, 121, 122, 119].

There are other data that sex hormones reduce the amount of thymus hormones, and gonadectomy, increasing the weight (mass) and cellular composition of the EU, increase its secretory activity [127]. Luteotropic hormone and prolactin cite EU tasks [50, 56, 104]. Experimental studies have shown that decirebation, pituitary ectomy, thalamic damage are accompanied by EU atrophy [50, 101].

Thus, the communication of the EU with the internal secretion glands is activated, and the relationship of the renal gland with the sexual layer and the sexual glands weakens the opposite effect. [50, 51, 72, 80, 121, 122, 124, 125].

1.2. Thymus is a modern view of age-related gland involution (TOI) and accidental involution (AI), as well as pancreatic maturation syndrome (PMS).

Age growth is explained by a decrease in the weight of Thymus parenchyma, mainly a decrease in the production of hormones and T-lymphocytes, which is called age or physiological involution (AI) [2, 9, 11, 50, 56, 127, 128, 129]. There is no particular general idea of when physiological or age-related involution (SJ) will begin. It is noted in the scientific literature that age-related involution can begin in pubertal periods [2, 11, 56], and at the age of 2-3 years [50], and at the age of 7 years [56], and can occur after 20 years [11].

Opposing opinions are due to the fact that histological examination results differ during periods when the relationships between the weight of the EU and its parenchyma, stroma and fat cell differ. Based on these data, some authors note that EU IO can begin not only in the first first years of birth, but also in the first first months [50, 110, 120].

The original weight of parenchyma thymus can increase slightly in the first first months of the child's life, and then progressively decrease, especially in the period up to 40 years at a high rate, after which the rate of involution decreases [50, 110]. Among the literature, such data are again found that the total weight of the EU does not change throughout life in healthy people who added its capsule, fatty fiber [108].

The gunpowder layer thymus begins to decrease more slowly than its magic layer, the hematothymic barrier is preserved, changes in perivascular voids (PV) in the cavities are clearly manifested [50, 101, 119]. From the first year of the child's life to 25-40 years, the BPB will increase in size, and then quickly decrease.

It is due to the growth of the military-industrial complex that an age-related increase in the EU is observed [50, 121, 129].

From the first age of the child's life, primary, primary lipocytes begin to appear in the BPB and its environs (and then only in the interband stroma). In addition to lipomatosis, stromal sclerosis develops, especially accelerates after 10 years. The surviving remains of thymus parenchyma between the ages of 31 and 60 will be limited to large-scale oil fiber. [11, 50, 109, 111, 112, 113].

A mathematical calculation showed that a complete inversion of EU parenchymy can occur around the age of 120. By the age of 17, the lymphoid composition (component) of AB parenchyma is 50-55%, and by the age of 60 - 10% [109, 128].

The causes of age-related involution (YoI) have not been established. According to the above approvals, the growth of EU parenchyma will be observed during puberty periods, but this process may also be associated with hormone production. However, data related to EU involution indicate that genetically programmed up to one year [50, 56, 127, 121, 129].

By 70-90 years of human life, the production of EU hormones (timtogenic factors) drops to 50-70%, the expression of antigens in the HLA system can also decrease due to the AB epithelium. However, the production of T-lymphocytes remains unchanged in this age category, as well as in the indicators of low even levels [193, 228]. Over age, this will be associated with a weakening of the EU tasks, one of the main reasons for which is an increase in immunopathological processes and oncological diseases that contribute to the development of immunodeficiency [50, 127, 131].

Unlike some provisions, age-related EU inversion (tract) is synchronously accompanied by age-related bone marrow transformation. At the same time, both in the EU and in the bone sandbox, the main dominant cells that are actively involved in the proliferation process [50] are always preserved.

To a lesser extent, there is no IoI in the EU, while the process of "persistent thymus" develops. In this case, renal glands are accompanied by insufficiency of the bladder layer functions, as well as activities to combat infectious diseases are weakened [11, 50].

Accidental involution (AI) is a stereotypical EU reaction that has a strong effect on the body (diseases, injuries, intoxications, hunger, cold, etc.). This concept appeared at the beginning of the last century. I. hammar (1929), "accedentis" from the Latin word, the complete translation is "chance," which in this case provides that a random process is not a transformation of a member, but a process that caused it. It is this process that is not random, but on the contrary, a characteristic and stereotypical employee [11, 50, 56, 121, 123].

The EU AI process constantly develops as a weakening of the active functional properties of the member, can continue even until the development of atrophy that occurred in the EU member, and it is under these conditions, especially in young children (from birth to 1 year), that the development of immune dependence, "autothymectomy" is possible [50, 121].

The factors causing the cause of AI can be very diverse in the lot. The causes of the development of AI in the EU can be after various infectious and non-infectious diseases, malignant tumors, metabolic disorders in the body [2, 11, 42, 45, 50, 52, 64, 119, 125, 126]. In some scientific literature, it was noted that the development of EU AI develops after splenectomy [115]. It can also be observed with colds and hypoxia. For example, in newborns in holates of acute oxygen deficiency, usually in the EU, an AI employee is not seen, or manifests himself in the form of first-degree AI. In congenital heart diseases accompanied by hypoxia, the AI process is not observed, but can be accompanied only by mild signs [45, 117].

When treated with glucocorticoid and cytostatic drugs, X-ray radiation can lead to the rapid development of EU AI in young children, while the EU environment can also occur [112].

In many cases, accident infusion (AI) of thymus develops in children with infectious diseases, especially in infectious diseases of the gastrointestinal tract, severe pneumonia, meningoencephalitis, basket, local purulent processes (phlegmon, osteomyelitis), poor quality quickly develop in plants and heterogeneous courtyards [50, 131].

The pathogenesis of AI in the EU has not yet been considered or analyzed. There are some suggestions that this may be adaptation in stressful processes - adaptive antiviral syindrome [50]. The main essence of the AI process in the EU is that the hypothalamic-pituitary-renal gland is explained by such lenses as activation of reactive antitumor processes in the system, an increase in the amount of glucorticoids in the blood, and a weakening of the production of biologically active substances by the EU [11, 50, 109]. This process may not be observed in all parts of the EU, as some parts are in a deranged state [50, 90].

Five phases of AI development have been identified in the EU [50, 111]. In the initial phases, processes such as the relative excess of the mass and volume of the EU member, and then the weakening of functional activity, the development of atrophy, reduction in size, lipomatosis, sclerosis and the formation of microcalcinates are observed. The AI process in the EU can completely slow down in the expected phase of development. After the termination of aggressive factors, a complete recovery of EU activities can be observed, that is, the presence of normal age sizes and weight, the restoration of functional activity, etc. Regenerative and restorative possibilities after the AI process in the EU are evaluated in a hall derived from the peculiarities of its etiological impact, in a hall derived from the general objectivity of immune system recovery [11, 50, 101].

EU growth syndrome is included in heterogeneous holates [110]. In young children in many hills, thymomegaly is observed - pancreatic maturation syndrome (PMS), in which there is an increase in the volume and weight of the hall, in which its normal histoarchitectonics is preserved [2, 42, 50, 121].

The principles of a syndrome of growth (ABKS) are developed, the individual AB sizes [2, 101] are considered and also increase in the thymus sizes in the early phases AI is considered [49, 50]. The EU can consider increased only with a growth normal age incidences: for example, virus and bacterial diseases - up to 50% and more, viral and bacterial diseases in the first day - up to 100%, long infectious - at diseases of inflammation, a resuscitation measure after holding actions or treatment by steroids - up to 5% [42].

Information on PMS doesn't meet in many scientific literatures. In this situation there is a question that can cause further a relevant discussion, that is increase in the EU at children of early age, newborns is a normal or pathological negligence [20, 44, 71, 120, 121]. A number of authors consider that increase in the EU at babies and children is physiological process, that is normal counteraction to the outside world which has nothing in common with easing or loss of adaptation opportunities of an organism [50, 121, 125].

Recently there were some data that influence of adverse factors of the environment and child care can also affect the EU [9, 10, 117].

According to certain authors, the timomegaliya is a pathological process, that is an immunodeficiency syndrome, violation of activity of a neuroendocrine system [19, 20, 22, 52, 65, 67, 77, 78, 79, 80, 81, 121, 122].

Thus, despite a large number of the achievements and data in medicine concerning the EU, his change in newborns, such concepts as PMS remain unknown.

At newborns, at young children morphological changes in the EU and incompatibility of data by the nature of ABKS are observed. Intervals according to increase in the sizes of the EU, according to section data, can be 36% among the died newborns (28-42 weeks), newborns have 16% and children have 16% up to one year [44, 45, 46, 50].

At newborns, among young children aged up to one year generally 2-2.5 increase in volume of the EU often meet at children shooters [50, 60, 64] Further at children at the age of 3-5 years and during these periods, in 98% of cases, the regressive thymus sizes in itself begin to increase [60].

Because of a large number of PMS at the died newborns and babies in a month after the birth this process can be considered patrimonial [42, 44, 45, 50]. Etiologic factors of development of ABKS are, generally intraocular effects (50, 130] within the first three months of pregnancy and the period of a fetogenez. The main reasons - presence of infectious diseases at pregnant women [8, 50, 54, 64, 92, 93, 124, 127, 128].

According to some authors, the meeting of ABKS considers it a racial oiml. Often meets in families with allergic, endocrine, rheumatic, warm frustration, chronic diseases of lungs [50, 59, 61, 64, 87, 121]. Other authors consider that the birth rate can increase because of dependence of parents on age [78, 80, 81].

The following signs, smooth color skin, normal growth of hair on the head, good development of a hypodermic fat layer, poor development of a muscular system, decrease in expressiveness of fabrics, increase in the sizes of the diary of an organism, narrowing of a front part of a skull, reduction of a neck and thorax, lengthening of baldyrsky, fir-tree and foot panchevy areas, stigmata generally meet at children with a timomegaliya [33, 61, 64, 65, 77, 81, 118, 124, 125, 128]. G. Kuzmenko (1988) watched a phenotype of this look at 90% of children of ABKS [64]. According to various authors, ABKS differed from the existing young children in growth of body weight and a neck [19, 20, 35, 36, 43, 60, 69, 76, 20, 113, 117, 118, 119].

In certain cases, when PMS meets at young children more, than at a brain, at children the tendency to a dizembriogenez, that is development of defective diseases increases [44, 61, 121]. According to certain scientific data, development of these defective dressing gowns is expected for 23.1% [121], and according to other scientific data - for 80.9% [61]. In hills with developed to stigmata the following changes generally meet: diastases of a direct muscle of a paunch, Gothic smoothing, dysplasia of a cranked joint, umbilical cord and down jacket [61]. Occur among malformations: congenital heart diseases and defects of veins of veins of a vein [13, 19, 64, 117, 118, 128, 129], malformations of an endocrine system, numerous neochromosomal anomalies, biochemical defects [19, 21, 22, 42, 44, 64.73].

In children with PMS, compression of members of the corn gap can be observed, which is accompanied by dry cough, noise breathing, twisting of the vessels of the lateral vein [79].

Many tests revealed cases of lymphoid apparatus hyperplasia [19, 64, 69, 71, 80, 87, 124], as well as an increase in the number of white blood cells and lymphocytes in the peripheral blood [35, 36, 37, 76, 81, 98]. A direct relationship between oral growth and thymus weight growth has been identified [31].

In children of such groups, the inspectors revealed certain changes, that is, changes in the endocrine system, primarily disorders of the functions of members of the hypothalamic-pituitary-suprarenal system [3, 21, 55, 64, 65, 71, 80, 87, 121]. With a decrease in the amount of adrenocorticotropic hormones, 11-OKS and cortisol hormones, secondary renal failure can also be observed [36, 70, 71, 78, 80, 87]. In children with PMS, hypoplasia of the renal sex layer, weakening of thyroid function, as well as a sharp decrease in sexual activity were observed [21, 36, 79, 80, 87, 99]. In the scientific literature, PMS is found in the composition of zardob obtained from children (AB), with some data on a decrease in the amount of glandular hormones [20, 64, 79, 94, 100, 101, 122].

Thus, in a well-formed EU, there were violations of function and a lack of activity of many members of the internal secretariat system [21, 36, 43, 44, 64]. The concept of PMS, according to many authors, is considered as an immunodeficiency syndrome accompanied by a violation of the T-cell zone [3, 10, 21, 34, 35, 49, 50, 64, 75, 79, 96, 101, 121]. A decrease in the functional activity of T-lymphocytes was observed, and an increase in the number of primary lymphocytes (Nol lymphocytes) was mainly associated with a decrease in thymogen activity [35, 42, 49, 64, 94, 100, 101, 122, 128]. In the immune system, a weakening of the functional activity of the V-cell link was noted. Despite high or normal B-cell counts, immunoglobulin classes G and A decreased in the urine composition [61, 70, 79, 82, 84] I A [21, 61, 64, 79, 82, 84]. Immunoglobulin mumin [59, 74]. An increase in the content of neutrophils and macrophages and a decrease in their processing activity were observed [21, 64].

Children with PMS have a very high tendency to acute respiratory viral infections, especially their recurrence and severe delay are often observed [21, 59, 64, 87, 107, 116, 121]. The passage of pneumonia continues at a very serious level [37, 51, 71, 82, 121]. Infectious bowel diseases can also continue at a very severe level and pass until chronic cold [129]. It is the aforementioned infected bowel diseases that are characterized by a large number of cases in young children and a high mortality rate [64, 80, 123].

Unlike data in some scientific literature, PMS was associated with changes in the nervous system. The main common neuropsychological statuses are: modesty, increased unit reflexes, rapid filling, weakening of the internal braking system [40, 60, 64, 83, 84].

The literature refers to the need to vaccinate children with PMS [20, 23, 58, 64, 65, 67, 88, 104, 126, 127].

Thanks to numerous studies of specialists, PMS with a specific neuroimmune status, vaccination in children is not carried out according to the general rules of vaccination, since in children in such a holat, due to the large number of adverse effects in postoperative processes, a large number of complications were observed. Therefore, it is recommended for such children to vaccinate only individually according to the vaccination calendar in combination with medical and preventive measures, and if the EU exceeds the size in agar, vaccinate only in holat, the size of which is reduced [58, 64, 65, 67].

According to other authors, vaccination measures were proposed in the hall based on general foundations, since after vaccination, such children have natural "wild" cliches of infection, and the development of severe ailments is acquired [23, 88, 126].

Thus, it can be concluded that in many literature there is enough approval about the normal structure of the EU, but it should be noted insufficient information covering individual cell structures, individual layer structures, changes in the increase in the EU.

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