MORPHOFUNCTIONAL PROPERTIES OF THE SPLEEN OF WHITE RATS IN POSTNATAL ONTOGENESIS

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Annotation research related to the period of white rats of postnatal age talog'idagi ontogenez morphological, and functional changes morfometrik were analyzed. The results obtained in the analysis, the mass of the spleen index, the linear dimensions, the relative area of the red and white pulp, white pulp of the configuration of specific features in different periods of postnatal age indicators morfometrik ontogenez. The results of this research to the development of the immune system of laboratory animals depend on the age of qonuniyat studying, as well as plays an important role in the development of criteria for experimental studies morfofunktsional.

Key words: spleen, white rats, postnatal ontogenez, morphology, morfometriya young of the period, limfoid tissue.

The actual ministry. To maintain the health of the human immune system plays an important role. As a member of the spleen, the immune system is of particular interest, because the immune system of the body of people and animals eng is one of the systems are sensitive, any effects will respond quickly [1, 3, 6].

The spleen of the immune system eng a complex structure on eis peripheral to one of the members. A sufficient level of information about the structure of the spleen emasin one and a contradiction to its structure, were conducted in laboratory animals for the study of different kinds of, mainly, and later men of the data obtained ekstrapolyasiya to be associated with [2, 7,8]

This member of the experimental research interpretasiya to make milkemizuvchilar turlararo pose difficulties because of the presence of men and talog'i gistoarxitekturasida differences [5, 7].

The effects of external factors in the composition of the spleen dedicated to exist despite the fact that many modern studies [4], the spleen tissue changes form depending on the age of limfoid morfofunktsional enough issues to be explored.

The research object as stored in 3,6 and 9 month age period viva 40 white male rats was without conditions using a simple seed.

Material and methods. Research 3,6 and 9 month age period zo 40 whitetstrack erk potential in rats was conducted. The use of animals in experimentation on etika rules, follow the requirements of the congress will Xelsinki. Rats were kept in viva simple conditions. Experience in the laboratory of the animal's age, sex, weight, nutrition were kept correspond to the conditions in the environment.

Without the experience of white rats under anesthesia, and the air was dekapitasiya was removed from the seed. Divorced opened the abdominal cavity were separated. Member separating after cleaning,vl oflaboratory scales the weight on the -200, as well as shtangesirkulyar using the length, width and thickness were measured. The weight of the spleen index, Minor = Vspleen*100/Vanimal using the formula, where V - weight.Parts of the spleen in 10% formalin in fiksasiya neytrallash am and after being washed in running water for 2-4 hours, and in an increased kontsentrasiyasi spirtlar xloroform suvsizlantirildi, the wax block was prepared in accordance with generally accepted methods. Mkm wax blocks 4-6 thick cut down gematoksilin – eVan fewer and your business, the method was painted.

The statistical processing of the survey data Strelkov (1986) were used without statement, parametrik variasion was done using statistical methods. Styudent the significance of the difference in value compared to the t-criteria were assessed using. Differences of $p \leq 0.05$ for statistical significance at the value of ethat ha.

Result: Three healthy white seed of rats without monthly spleen the surface of a smooth, dark red in color, elongated-triangular in shape and ovoidli, 11-12 rib area. Its member upper, lower and medial sides, as well as upper, lower and lateral surface is the difference.The average weight of the animal labaratoriya -117,27±3,76 g, its member in absolute weight - average 0,62±0,04 g, was. Average mass index 0,53±0,04% is equal to. The average length of its member - 27,17±0,47 mm, the average width of - 6,12±0,32 mm, height average - 2,86±0,24 mm, respectively. The total area of the spleen average - 150,82±1,63 mm^2 is equal to. Red and white member moneyьpasi, respectively, of the area relative 73,13±0,37% and 21,12±1,56% accounted for. White and red moneyьpain in the ratio of 1:3.4 at is equal to. Connective tissue elementlari the average of the relative area – 5,74±0,18% accounted for (as compared to the total area of the spleen incision). SP – 1:is equal to 4.2.

Zo 3-monthly whitetsin white rats of the track talog'i moneyьperiarterial the average width of the area pasi - 84,07±0,47 mkm, the average width of the area mantiya - 44,27±0,78 mkm, the average width of the marginal area - 78,19±1,26 was to mkm. The average diameter limfoid follikul - 414,07±12,16 mkm, the average diameter of the

reproduction center - 131,78±5,97 mkm is equal to. The average of the area relative limfoid follikul - 330,21±10,27 mkm^2, reproduction of the center of the area relative to the average - 106,37 ± 2,47 mkm^2 to make up. Follikulyar koeffitsent - 449,36 to germinativ-index folliklyar -31,83 to limfoid koeffitsent e4,93 is equal to sa.

Zo whitetsfor z money red talog'i ratsьtotal number of cells in pasi - 317 units, white moneyuьpain esa 471 units, respectively. White moneyuьhug a pain in structure strukturjayri when analyzing the amount of reproduction, the average number in the center limfositlar - 122,28±1,26, including in the field of periarterial the average number limfositlar - 107,26±1,08 units, the average number mantiya in the field of limfositlar - 136,74±1,52 units, the marginal area, the average number limfositlar - 104,38±1,24 units, respectively.

The average body weight of laboratory animals 6 healthy monthly 208,78±g, 4,37 its member in absolute weight average 0,86±0,07 g, the average mass index 0,39±0,02% accounted for. Zo white in this age periodtsof the rats compared to rats 3 times the monthly 1,78 track of the body weight, absolute 1,39 times while a member of its weight increased. The average length of the spleen-31,27±0,64 mm, respectively. Monthly growth rate of 3 white kalamishlarga than - 15,1%. The average width of the spleen – 6,54±0,14 mm is equal to. Monthly growth rate of 3 white kalamishlarga than-6,86%. The average height of the spleen-3,14±0,32 mm, respectively. Monthly growth rate of 3 white kalamishlarga than - 9,79%. A member's average total area 214,16±2,17 mm^2 is equal to.

Zo healthy whitetsin white rats of the track talog'i moneyuьperiarterial the average width of the area pasi - 88,76±1,14 mkm, average and marginal fit the width of the area without mantiya 45,74±1,04 mkm and 82,16±1,12 mkm is equal to. The average diameter limfoid follikul - 422,46±11,14 mkm, the average diameter of the reproduction center - 137,24±3,32 mkm is equal to. The average of the area relative limfoid follikul - 338,84±9,54 mkm^2, reproduction of the center of the area relative to the average - 110,18 ± 2,34 mkm^2 to make up. Follikulyar koeffitsent - 468,51 to germinativ-index folliklyar -32,48 to limfoid koeffitsent while 4,75 equal.

Zo whitetstalog'i money on the red track of the ratsьpasi cells in the total number of units 310, white moneyuьpain esa 457 units respectively. White moneyuьhug a pain in structure strukturjayri when analyzing the amount of reproduction, the average number in the center limfositlar - 120,32±1,22, including in the field of periarterial the average number limfositlar - 102,18±1,24 units, the average number mantiya in the field of

limfositlar - 133,48±1,34 units, the marginal area, the average number limfositlar - 100,17±1,16 units, respectively.

The average body weight of laboratory animals healthy 9 month 234,62±g, 5,24, your absolute weight average member 0,89±0,03 g, the average mass index 0,37±0,01% accounted for. Zo white in this age periodtsof the rats compared to rats of body weight 1,12 track monthly 6 times its weight of absolute a member of etimes sa 1,04 increased. The average length of the spleen-33,92±0,76 mm, respectively. Kalamishlarga than 6 monthly growth rate of white – 8,47%. The average width of the spleen – 6,76±0,24 mm is equal to. Kalamishlarga than 6 monthly growth rate of white-3,36%. The average height of the spleen-3,26±spends 0.34 mm, respectively. Kalamishlarga than 6 monthly growth rate of white - 3,82%. A member's average total area 228,47±2,26 mm^2 is equal to.

Zo healthy whitetsin white rats of the track talog'i moneyъpasi periarterial areacaverage width - 83,94±1,22 mkm, average and marginal fit the width of the area without mantiya 43,92±1,06 mkm and 77,16±1,18 mkm is equal to. The average diameter limfoid follikul - 416,14±9,21 mkm, the average diameter of the reproduction center - 129,12±2,82 mkm is equal to. The average of the area relative limfoid follikul - 332,74±9,22 mkm^2, reproduction of the center of the area relative to the average - 104,29 ± 2,18 mkm^2 to make up. Follikulyar koeffitsent - 418,63 to germinativ-index folliklyar -31,02 to limfoid koeffitsent while 4,95 equal.

9 monthly zo whitetstalog'i money on the red track of the ratsьpasi cells in the total number of units 304, white moneyъpain esa amounted to 427 units. White moneyъhug a pain in structure strukturjayri when analyzing the amount of reproduction, the average number in the center limfositlar - 114,64±1,16, including in the field of periarterial the average number limfositlar - 93,24±1,14 units, the average number mantiya in the field of limfositlar - 126,63±1,18 units, the marginal area, the average number limfositlar - 92,96±1,12 units, respectively.

So healthy zo whitetstrack the indicators corresponding to the period of the rats age talog'ini morfometrik this analysis and morphological analysis, the body weight of laboratory animals and the absolute weight and the member length, the width, the height of the high growth rate at 6 months compared to the 3-month period, respectively, and 1,78 1,39 times and 15,1%, 6,86%, 9,79% increase was observed. Compared to the period of 6 months in 9 months without 1,12 1,04 times and decrease the growth rate of this index and the corresponding 8,47%, 3,36%, 3,82% accounted for. Figure 9

monthly period, the total area of the spleen occurs in a high handle, 228,47±2,26% is equal to.

Periarterial, mantiya in the marginal area and the width of the high cost of the 6 month period (respectively 88,76±1,14 mkm, 45,74±1,04 mkm and 81,16±1,12 mkm), low cost esa a 9 month period (respectively 83,94±1,22 mkm, 43,92±1,06 mkm and 77,16±1,18 mkm) were observed. Zo white and the center diameter 3 month period limfatik follikul germinativts, respectively, in the rats track 464,07±12,16 and 145,78 mkm±5,97 mkm next month age period and 9, respectively, decreased in the period, go 416,14±129,12 and mkm 9,21±2,82 was to mkm. Lymph'sk and the center of the area relative follikul germinativ higher in the 3-month period, respectively 368,21±10,27 % and 116,37±2,47 %, and a 9 month period, emo low, respectively 332,74±9,22 % and 104,29±2,18 %is equal to.

Limfoid structures determines the functional state of the spleen follikulyar koeffitsent high in the 3-month period (559,66), in the period of 9 months with elow sa (418,63), determines the level of the immune response and reproduction reflect the condition of gumoral center ettiruvchi germinativ-index folliklyar high in the 6 month period (32,48), in the period of 9 months with elow sa (31,02), T and V , indicating that the ratio of the size of the sphere limfoid koeffitsent high in the 3-month period (5,52), A 9 month period, esa low (4,95) value eha ewill determine channel.

Red and white moneyъpain, respectively, in the number of cells in the period of 3 months and 317 471 units to make up this indicator decreased in the next age period is equal to 427 304, and 9 units, respectively, and go month period. White moneyъpain struktur structures (germinativ center, periarterial limfatik this joint coupling feature in mantiya and marginal areas) in the period of 3 months, the number of electrons in the cells is high, a 9 month period to a low value of ewill ha.

Conclusion High immune activity of the spleen of white outbred rats was observed at the age of 6 months. This was clearly manifested in changes in the structural composition of the organ. It was established that the relative area of the white pulp of the spleen, the width of the periarterial lymphatic clutch, the mantle, and the marginal areas have a high indicator in this age period. In the 9-month period, a decrease in growth rates was noted, a slight decrease in the diameter of lymphoid follicles, the width of the white pulp areas, and the number of cells, which indicates a weakening of morphofunctional indicators of the spleen.

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