ASSESSMENT OF MORPHOMETRIC INDICATORS OF THE THYMUS OF WHITE RATS WITH MG DEFICIENCY

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Annatation: white seed tissue of rats without histological structure of the thymus Research, cell culture composition and the analysis of the indicators was immunogistokimyoviy qiyo. Results the analysis that magnesium alimentar yetishmovchiligida parenxima this member-strong balance the violation of limfoid tissue morfometrik indicators, limfoid and will determine the level of reduction in the number of cells express immunogistokimyoviy markyorlar. These changes decrease the body's immune response suppression and protection with appeared.

Key words: magnesium shortage, thymus, white rats, limfopoez t-lymphocytes, the immune system.

The actual ministry. The immune system of the body provides protection and adaptation to the effects of the different factors. Immunokompetent members in maintaining the body's immunological gomeostaz plays an important role in experimental and clinical conditions [4].

Thymus is a member of the central immunogenezning. It not only at, but also by the members is also immune peripheral t-lymphocytes and tabaqalanisnini provides the immune reaction at the same time for the implementation of administrative and t-lymphocyte populations and encourages the integration of various makrofaglar [1,6, 7].

Magnesium is important in the implementation of many regulatory processes in the human body. Magnesium 500 more than of enzymes, the structural part is, metabolic reactions take part in which the main elements is one of. Also, Mg proteins, in particular, connective tissue collagen synthesis in, nuklein acids and lipids exchange is a simple idea, and someone with an active take part will [2].

The importance of magnesium deficiency in his body, the study of human health in terms of the quality of the previous level from the clinic evaluation and allows you to avoid element in their time. The cells in various systems of the body member and the

decrease in the amount of mg as a result of various pathological processes in the development of [3,5].

The main pathogenetic mechanisms of magnesium in the human body evolve in studying pathological cases yetishmovchiligida many accomplishments despite not eat enough of these micronutrients yetishmovchiligida thymus information about changes in configuration.

The research object as 6 and 9 months of age in the period viva simple conditions smentallyganseed without white 80 units in male ratsled to the use of n.

Material and methods. Research was conducted in male rats than 80 without white seed. The rules of ethics on the use of animals in experimentation, Xelsinki the requirements of the congress will follow. 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. Tim morfofunktsinal two indicators to determine the structure of a group of animals was established. I group - normative (n=40); group ii – magnesium diet reached given white rats (n=40). For modeling a shortage of micronutrients German “Spezialfutter ALTROMIN gmbh & co. KG” prepared by the firm led to the use of a special feed. Special series no. feed 36/2024 have been provided with an official certificate. Rats in the control group to 2 sticks per day were given the usual feed. Without special body weight in feed per day due to the experience of the group 2 sticks of 20 g were used.

The results of the survey. Paired with one of laboratory animals of the thymus in the control group consists of two pieces, if you make it a part of to'sh in the lower third of the bone is located. 6 and 9 month healthy white seed capsule of the thymus of rats, respectively, the thickness of the gate without the field 5,82±0,32 and 5,97±mkm was of 0.38. The diameter of the proximal part Trabekulaning respectively 13,36±0,27 and 13,52±0,22 mkm, in the distal portion 10,28±0,14 and 10,43±0,22 determines that it is equal to mkm. Thymus area corresponding to the period of the age of the piece without 64,27±0,12% and 52,27 ± 0,48% accounted for.

Magnesium shortage in the group of rats breed I am modeling the field without the capsule of the thymus the white gate white rats in the control group, the thickness of the monthly period in comparison with the 6 young 1,02 times, 9 month period in young 1,04 timesincreased. The diameter of both the proximal and distal part of the age of trabekulaning due to the period without 2,4% and 2.7% to increased lekarzemqlanga. The 6 month period piece of the area of the thymus in young 1,02 times, 9 month period

in young 1,03 times decreased and 6 respectively2,74±0.36%, and 50,52 ±0,34% are accounted for.

Healthy white seed kernels and thymus of rats of the portion of the tissue without histological prepretlarida po'sloq is the difference of the floor. Po'sloq kernels of the border between the exact expression and the floor was not. Parenximasi will identify the piece was replaced by fat tissue. The bark of the thymus in the control group 6 and 9 respectively of the floor area of laboratory animals monthly 63,86±0,37% and 58,83±0,26%, respectively, of the floor area 28,52 kernels±of 0.38% and 32,92±0,42 % accounted for.

Bark – the age of the index during the period of both kernels without becoming 2,24±0,16%, and 1,78±0,36% lekarzem is equal toqlanga. The thickness of the bark layer of the monthly period in young 248,27 6±11,54 mkm, in the period of 9 months young 165,27±9,76 was to mkm.

Magnesium shortage in the group of rats without I am modeling the white bark of the floor area of the thymus intakt breed of white rats in comparison with 6-month age period 2,8 %, 9-month age period of 3.7% respectively. The floor area during the period of the age of both kernels without becoming 1,02 and 1,04 timessince lekarzem is reduced toqlanga. Bark – kernels is reduced and both the age of the index during the period of the corresponding 2,2 without1±0.1to 4% was 1.7 and8±0.12% accounted for. Healthy white kalamshlar indicators in comparison with the thickness of the floor of the bark, 6 and 9 month age periodsida fit without 1,03 times is reduced.

Healthy 6-month age period of laboratory animals of the thymus t-lymphocytes analyzed by a particular type when the amount of the floor of the bark in the field of small lymphocytes subkapsulyar 38,42±0,58%, 64,78 area kortiral+0,44%, kernels on the floor 34,28± 0,17% accounted for. The average amount of lymphocytes in the field of the floor of the bark subkapsulyar 17,58±0,26%, kortiral area 16,37±0,22%, kernels on the floor 31,26±0,18% is equal to. The amount of the floor of the bark in the field of large lymphocytes subkapsulyar 17,64±0,28%, kortiral area 6,32±0,12%, kernels on the floor 4,26±0,10% accounted for.

9 month age period, the thymus of rats in the control group without the bark of the white breed of small lymphocytes in the field of the amount of the floor subkapsulyar 33,46±by 0.41%, kortiral area 52,92+0,36%, kernels on the floor 26,12± 0,14% accounted for. The average amount of lymphocytes in the field of the floor of the bark subkapsulyar 12,73±0,18%, kortiral area 11,94±0,16%, kernels on the floor - 32,27±0,22% is equal to. The amount of the floor of the bark in the field of large

lymphocytes subkapsulyar 12,68±0,14%, kortiral area 4,26± 0,10%, kernels on the floor 3,19±0,16% accounted for.

Magnesium deficiency without modeling the components of the thymus of rats in group I and 6 monthly white seed corresponding to holda small amount of lymphocytes by 2.0%, 3,% 0, 2,0%, and medium lymphocytes in the amount of 1,1%,1,2%3,1%, and large lymphocytes in the amount of 2,0%, 1,1% and 1,0% ha decreased. 9 seed the thymus of rats in the experimental group corresponding to the components of the monthly white without case, a small amount of lymphocytes 3,2%, 4,1% and 3,1%, and medium lymphocytes and the amount of 2,4%, 3,2% and 2,7%, and the amount of large lymphocytes 3,2% respectively, 1,0% to determine the reduction.

Analysis of thymus cell reactions immunohistokimyoviy gave me the opportunity to determine the content of the piece, and the bark-t lymphocyte marker cd3 in the field of representing kernels showed a positive reaction to give. The white bark and seed kernels of the thymus of rats for 6 months without the amount of CD3 positive cells in the floor fit without 45,68±1,36% and 27,83±0,62%, in the period of 9 months in laboratory animals yosin fit without 35,46±1,08% and 24,27±0,36% accounted for.

Healthy white cells that seed the thymus of rats without drug, representing the ki-67 was given special treatment with antitelo markyorini for the sake of determining and many many proliferatsiya will identify the cells. 6 monthly period without the share of these cells in rats breed yosin the white bark on the floor 36,12±1,02%, kernels on the floor 12,74±0,68%, in the period of 9 months in laboratory animals yosin fit without 25,92±is 0.74% and 7,09±0,48 % is equal to.

Anti-apoptotik protein - cml bc-2 in the parts and pieces of bark to the positive reaction you will ma'n member, as well as kortikomedulyar observed in the cell area, and 6 and 9 months of age, respectively, in period 8,16±0,16% and 10,94±0,18% respectively.

Magnesium shortage kalamuslarda 6 month period will breed called white level corresponding to the age of the thymus express the cd3 components without markyorining 3,05% and 2.1% of a 9 month period corresponding to the age and without 4,04 2,94% and decreased by. Ki-67 6-month age period corresponding to the case of the express markyorini level and 1.0 to 2.7 percent, corresponding to 9 month age period and without 4,03 2,0% reduction will determine the. Anti-apoptotik protein

- cml bc-the period of the level corresponding to the age of 2 without express 1,0% and 2,05% and decreased by.

Conclusion. The conducted studies of the thymus of rats without magnesium yetishmovchiligida white seed morphological structure, composition and cell culture showed that experienced significant changes in the indicators immunohistokimyoviy. This bioelement yetishmovchiligida trabekusining thymus capsule and thickening, reduction of the floor area of bark, and bark increased the relative share of the floor kernels–kernels was observed a decrease of the index. Magnesium deficiency is part of the structural member in small, medium and large number of lymphocytes decreased. This condition t-lymphocytes is associated with the suppression of the stratification of the process, the analysis also results in clear immunohistokimyoviy appears. In particular, the number of CD3 positive cells markyoriga 6 and 9 months of age in the period a significant decrease in thymus T-cell populations that had a reduction of shows.Also, ki-67 markyorining ekspressiyasini decrease lymphocyte toe‘linadi process had reduced that is given. Anti-apoptotik cml bc-2 protein , the amount of decrease while apoptoz the process of strengthening means. Thismagnesium shortage of thymus struktur tizilma of, limfoid the cells of the composition and immunological active in the affairs of negative effects and the member, the age of the gardenliq involyutiv processes dynamic that provides.

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