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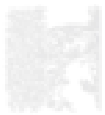
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MORPHOLOGICAL AND MORPHOMETRIC CHANGES OF LYMPHOID STRUCTURES OF THE SPLEEN UNDER THE INFLUENCE OF 2 DIFFERENT AND 3 DIFFERENT TYPES OF DRUGS UNDER THE CONDITIONS OF POLYPRAGMASIA

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Abstract: The information presented in the article shows that currently fighting polypragmasia with anti-inflammatory drugs is one of the important tasks of providing medical care to patients of any age. This situation necessitates the need to develop a strategy that will allow the most effective and safe use of drugs in the treatment of patients, which will allow to increase the quality of medical care and reduce the number of side effects of drugs.

Keywords: polypragmasia, morphometry, lymphoid

Relevance. In the modern world, on the one hand, rapid development, progress is observed in the development and implementation of a huge number of drugs that can restore and/or improve the pathological condition of the patient, and on the other hand, seriously harm the body. By now, polypragmasia is considered a serious health system problem due to the consequences of yatrogenia, since it is manifested clinically by a decrease in the effectiveness of pharmacotherapy and the development of serious adverse reactions to drugs, as well as a significant increase in health costs. Anti-inflammatory drugs are considered one of the most widely used drug groups in medicine. Their advantage is that when used together, the drugs remain of complex action (fever-lowering, anti-inflammatory and analgesic), as well as that they can be used in a wide range based on the instruction. According to the pharmacodynamic effect, 5 types of anti-inflammatory drugs are common, which are often prescribed by medical personnel. However, currently, the available information on the results of therapy with these drugs does not allow us to draw a clear conclusion about their effectiveness or inefficiency, as well as the development of side effects in such combinations.

Material and methods. During the examination, a total of 40 spleen tissue morphologically studied, separated into two groups, based on macroscopic and microscopic studies of spleen tissue. For general morphology, 3 slices were cut from each spleen, i.e. 1.5 × 1.5 cm from the upper area, middle area and bottom, and hardened in a 10% neutralized formalin. After 2-4 hours of washing in running water, the concentrate was dehydrated in increased alcohols and benzene, then paraffin was poured and blocks were prepared. 5-8 μm incisions were made from paraffin Lee blocks, and hematoxylin and eosine blyadi. The following anti-inflammatory agents have been used to study the effects of polypragmasia occurring in the spleen in experimental groups of white non-breeding rats:

Aspirin (derivatives of NYAQD-salicylic acid), paracetamol (derivatives of NYAQD-anilides).

Examination results and discussion. White broodless rats obtained for the experiment were separated into 3 groups (n=40):

I - (intact) Control (n=20);

White non-bred rats that took II - gurux-2 different nosteroid anti-inflammatory

drugs, paracetamol 15 mg / kg, aspirin 5 mg / kg (n=20);

III - 3 white non-bred rats that took various nosteroid anti-inflammatory drugs, paracetamol 15 mg/kg, aspirin 5 mg/kg, ibuprofen 6 mg/kg (N=20); these drug doses were calculated empirically and administered daily into the stomach in solution form for 10 days.

From 141 days of development to 150 days of age, rats in the control group of white-breed rats were sent 0.5 ml of distilled water into the stomach through a metal probe for 10 days.

Incisions from the spleen of white-breed bats were morphometrically examined, and the size of the spleen parenchyma, lymphoid structures, was measured using an ocular micrometer, in which we used a trinocular microscope made in China. DN-107t / Model NLSD-307b (novel, China).

Mathematical processing of morphological data obtained during the study directly from the General matrix of the Microsoft Office data package "Excel 7.0" on the Pentium - IV personal computer, using the capabilities of the "STTGRAF 5.1" program, found standard deviation and representative errors.

Variational parametric statistical methods were applied by calculating the mean arithmetic (M), mean quadratic deviation (m), mean standard error (m), relative values (frequency,%) of the studied indicator.

The statistical significance of the measurements obtained when comparing dimensions was determined by calculating the probability of error (P) when examining the normality of the Student criterion (t) distribution (according to the kurtosis criterion) and the equality of general variations (F - Fisher criterion). Tables of indicators and critical values for optimal levels of significance (P) were used to assess the statistical significance of the calculated criteria.

The four main levels of significance were taken as statistically significant changes: high - $R < 0.001$, middle $R < 0.010$, low (marginal) - $R < 0.050$, insignificant (unreliable) - $R > 0.050$.

Thus, the use of a complex of nonsteroidal anti-inflammatory drugs (NYAQD) as described above led to the appearance of various pathomorphological changes in the parenchyma of the spleen in rats. In particular, there was an increase in lymphocytes, an expansion of the mantle and marginal areas (figure 1,2,3,4). In some blood vessels, fullness was found, the expansion of the spleen capsule. Treatment of some chronic diseases is a long-lasting process, and at the same time, taking into account the fact that patients are more likely to develop toxic spleen pathologies, it is recommended to include blood creation and immune system support in treatment regimens in patients undergoing treatment.

Conclusions.

- This information allows you to distinguish pathologies using a microscope and compare cells with one another, knowing the normal indicators in the spleen.

- Histological methods for analyzing the morphofunctional state of the spleen are widely used in the diagnosis and differential diagnosis of diseases of the spleen of various etiologies.

- This information can be used in the Departments of histology, patanatomy of medical institutions to fill out microscopic and macroscopic information to students in the educational process.

- White-breed rats make it easier to establish a pathogistological diagnosis, knowing the parameters of comparing the morphometric indicators of the spleen in a normal state and in the case of the action of anti-inflammatory drugs in polypragmasia.

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