COMPARISON OF MORPHOLOGY AND MORPHOMETRIC INDICATORS OF LIVER TISSUE IN WHITE NONBRED RATS UNDER THE INFLUENCE OF 3 DIFFERENT DRUGS OF ANTI-INFLAMMATORY DRUGS IN NORMAL AND POLYPHARMACY.

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Abstract. In order to improve the effectiveness of treatment, the desire to help the patient get rid of all the diseases that have developed in him inevitably leads to the appointment of many drugs - drugs (drugs) - which, in turn, leads to polypharmacy in the patient.

Polypharmacy is a serious problem of the healthcare system, which is clinically manifested by a decrease in the effectiveness of pharmacotherapy and the development of unwanted adverse reactions, as well as a significant increase in healthcare costs. The term "polypragmasia" is often used in the medical literature, but there is no generally accepted definition.

For this purpose, to compare the morphometric parameters of the liver of purebred rats under the influence of anti-inflammatory drugs in a normal state and in polypharmacy parameters were studied. The goal of the work was to fill in the data on morphological and morphometric parameters of liver tissue.

Key words : morphometry **,** morphology **,** polypharmacy , and inflammation

Introduction:

Currently, according to the World Health Organization, polypharmacy is one of the problems of the 21st century. To inflammation against drug tools the most a lot used drug tools to the group enters Last times Polypharmacy is an iatrogenic result and health save serious to problems became Medicine of means pharmacotherapeutic features decrease patients treatment expenses to increase reason will be Of this due to polypragmatism problem not only medical , but also social problems the fact that and to him solution to find current task that shows . Jahan according to present at the time in polypragmatism to inflammation against drugs with to fight each how age to patients medical help in showing done is increasing . In the body another members row to the liver too polypragmatism effects , drugs under the influence of which occurs in the liver different pathological cases as well liver morphological changes learning according to scientific studies is being held . Medicine medicines under the influence of in the liver surface coming out diseases they are complications studied and treatment and prevention methods recommendation done But , one of time in itself one how

many to inflammation against preparations under the influence of in the liver to be possible has been morphological changes to learn dedicated affairs very less

Goals and objectives

The purpose of the study was to determine and evaluate the characteristics of the morphological changes in the liver parenchyma of five-month-old purebred white rats under the influence of anti-inflammatory drugs in polypharmacy. study and evaluation of normal morphological parameters of the liver of five-month-old purebred rats; to determine the morphological changes of the liver of laboratory animals with simultaneous use of two anti-inflammatory drugs; to determine the morphometric changes of the liver of non-white rats with the use of two anti-inflammatory drugs at the same time ;

Material and methods

During the examination, a total of 40 liver tissues, divided into two groups, were pathogistologically examined based on macroscopic and microscopic studies of liver tissues. For general morphology, 2 pieces of each liver, i.e., a large piece and a 1.5x1.5 cm piece from the middle part, were cut and frozen in 10% neutral formalin. After washing in running water for 2-4 hours, they were dehydrated in increasing concentrations of alcohols and xylene, then paraffin embedded and blocks were prepared. 5-8 μm sections were prepared from paraffin blocks and stained with hematoxylin and eosin. The following anti-inflammatory agents were used to study the effects of polypharmacy in experimental groups of white rats in the experimental group:

Results and conclusions.

White rats taken for the experiment were divided into 3 groups (n=50): I-group – (intact) control (n=20); 3-group - white rats that received 3 different nonsteroidal anti-inflammatory drugs , paracetamol 15 mg/kg, aspirin 5 mg/kg, ibuprofen 6 mg/kg (n=50); Doses of this drug were empirically calculated and administered intragastrically every day for 10 days in the form of a solution.

From the 141th day of development to the 150th day, rats in the Control group of white non-breed rats were given 0.5 ml of distilled water intragastrically through a metal probe for 10 days.

Sections taken from the liver of purebred rats were morphometrically examined, and the size of liver parenchyma and hepatocytes was measured using an ocular micrometer, in which we used a trinocular microscope manufactured in China.

The third group was the introduction of two types of anti-inflammatory drugs and the study of the morphological and morphometric changes in the liver parenchyma system called "morphology and morphometric characteristics of liver tissue in non-white rats".

Sections taken from the liver of rats were examined morphometrically, and the size of liver parenchyma and hepatocytes was measured using an ocular micrometer. Introduction of three types of anti-inflammatory drugs and morphological and in the liver parenchyma system study of morphometric changes, the use of a complex of anti-inflammatory drugs (IAD) drugs as described above led to the appearance of various changes in the liver parenchyma of rats.

Third group of rats weight was from 200g to 250g , the average was 225±6.98g . Of rats the third group liver mass from 7.6 to 9.8 g , average - up to 8.09±0.26 g , liver length 2.9-3.7cm, average 3.3±0.1cm, liver high and bottom shores between distance 2.2-2.6 cm, average 2.4±0.07 cm, the thickness is 2.8-3.2cm, the average is 3.0±0.9cm did Liver of hepatocytes transversely size from 19.0 to 26.0 μm , average 24.6 ±0.76 μm changes , hepatocytes of the cytoplasm average transversely of the section indicators range from 403.0 μm 2 to 675 μm 2 , average - 568.7±17.26 μm 2 . to 100 hepatocytes binuclear the number of hepatocytes is between 9 and 16 is 13.2 ± 0.40 on average . Central of veins the diameter is from 46.0 to 66.0 μm , the average is equal to 57±1.76 μm . Intersection veins diameter from 20.0 to 34.0 μm , average - 28.54±0.88 μm. Intersection of arteries diameter from 10 to 15 μm , average 13.04±0.41 μm will be Grass of the ways size from 15.0 to 28.0 μm , average - 21.8±0.68

Thus, the administration of a complex of steroid anti-inflammatory drugs (SAID) as described above led to the appearance of various pathomorphological changes in the liver parenchyma in rats . it is recommended to include hepatoprotective agents in treatment regimens.

Summery:

- This information allows us to distinguish pathologies and compare cells with each other using a microscope, knowing the normal indicators in the liver.
- Histological methods of analyzing the morphofunctional state of the liver are widely used in the diagnosis and differential diagnosis of liver diseases of various etiologies.
- These data can be used to fill out microscopic and macroscopic data in the educational process for students in the departments of histology and pathology of medical institutions.
- purebred rats under normal conditions and under the influence of anti-inflammatory drugs in polypharmacy knowing its parameters makes it easier to make a pathogistological diagnosis.

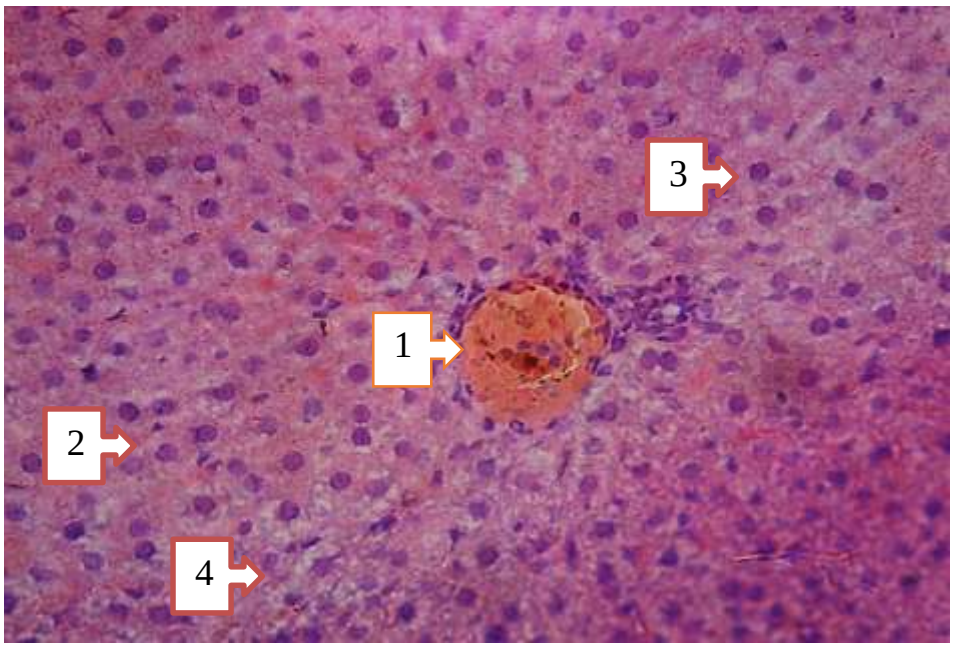
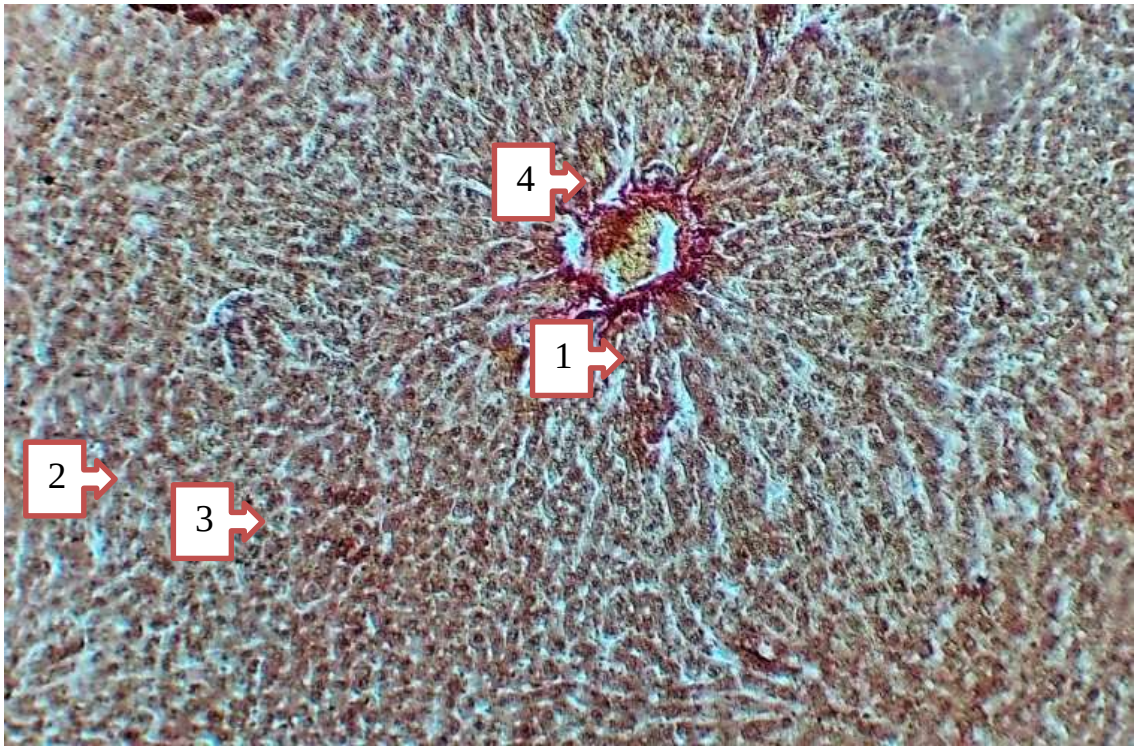


Figure 25 The central vein is full, surrounded by lympho-leukocyte infiltrations (1), the interlobular vein is full (2), fatty dystrophy (3), degeneratively changed hepatocytes (4)



Picture 2 The central vein is full, surrounded by lympho-leukocyte infiltrations (1), the interlobular vein is full (2), fatty dystrophy (3), degeneratively changed hepatocytes (4). Paint Van-Gieson. 10x20 ob.

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