



"SCIENTIFIC JUSTIFICATION OF LIVER MORPHOMETRIC INDICATORS DURING PREGNANCY IN CHRONIC KIDNEY FAILURE IN EXPERIMENTAL STUDIES."

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ABSTRACT

The treatment of liver pathologies in chronic renal failure observed during pregnancy worldwide and the prevention of their consequences remain a medical and social problem. Despite the development of methods of prevention and diagnosis, treatment of liver diseases, mortality rates continue to occupy a leading position. In our country, special attention is currently being paid to improving the social protection and health care system of the population, improving the quality of diagnosis, treatment and prevention of chronic liver diseases.

In some cases, based on morphological changes in internal organs, methods of differential diagnosis of the immediate cause of complications have been developed, each of which can have several consequences for the body at once, which can lead to death. The installation of such experiments is unthinkable without knowledge of the morphological and morphometric parameters of laboratory animals, which is an important part of the model experiment and remains poorly understood to this day.

Introduction. Studying the normative morphological and morphometric indicators of the liver of fetal white-breed rats in the laboratory, determining the anatomical parameters of the liver in the fetus its experimental reactive changes after chronic kidney failure, comparing the fetal – dependent histo-topographic characteristics of the liver of white-breed rats with indicators of healthy rats in experimental chronic kidney failure; an experimental study of the comparative classification of morphometric changes in the liver of fetal rats after correction with juicer water in chronic kidney failure was carried out.

The tasks of the study consist of those in the well: 1. Study of normative morphological and morphometric indicators of the liver of fetal white-breed rats;

2. Study of the anatomical parameters of the liver of white-breed rats in the fetus and its reactive changes after experimental chronic kidney failure;

3. Comparison of fetal –dependent histo-topographic characteristics of the liver of white-breed rats with indicators of healthy rats in experimental chronic kidney failure;

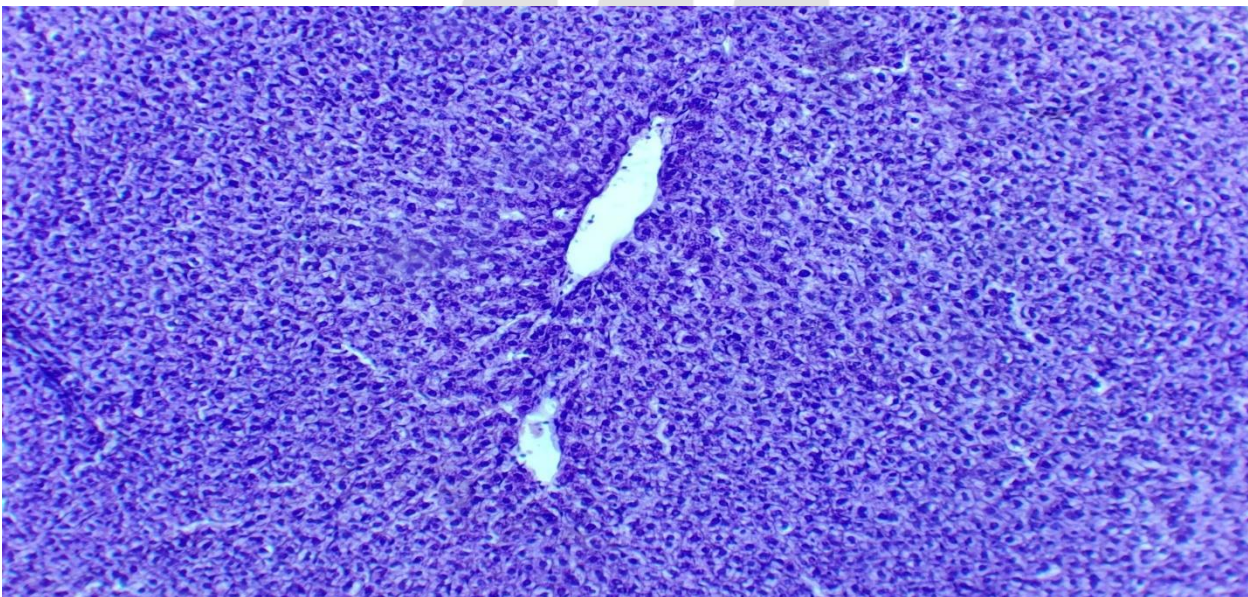
4. Comparative classification of morphometric changes in the liver of fetal rats after correction with juicer waters in experimental chronic kidney failure.

I will give us an example of what was done before the experiment. Direct injection of embryonic cells provides a quick tool for epithelial differentiation and tubulogenesis to develop the necessary stages, including the compound complex and the assembly of the basal membrane. In addition, grafting techniques have been studied that allow the study of embryonic renal vascularization and the effects of endothelial cells on differentiating embryonic cells. (Steenhard, Brooke M -2021).

There has been a study of a significant correlation between high consumption of fatty foods in white rats and structural changes in the kidney, such as decreased glomeruli number density, deformities, significant expansion of renal vessels and tubules, glomerular necrosis and atrophy, and thickening of the basal membrane. (Muhammed eyüp Altunkaynak, Elvan Ozbek, Berrin Zuhul Altunkaynak, Ismail San, Deniz Unal and Bunyami Unal-2020).

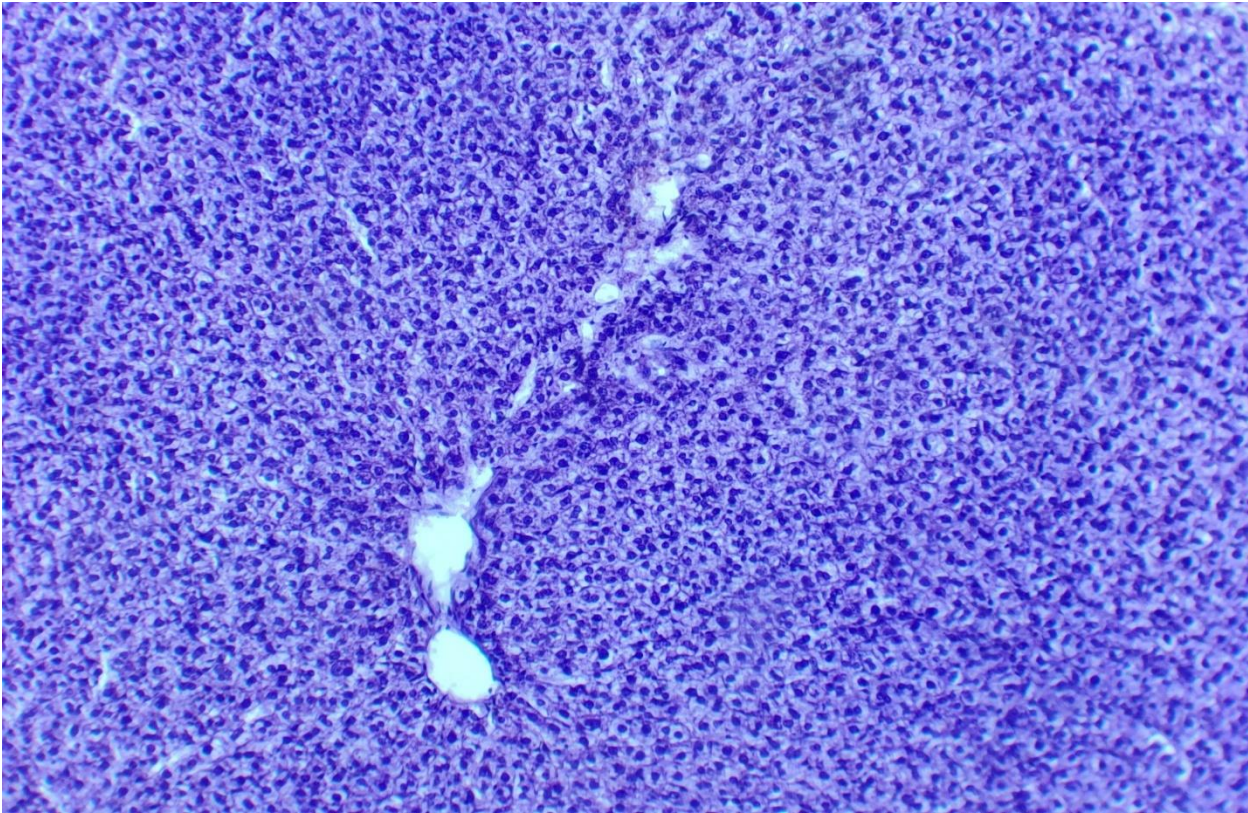
The purpose of the scientific work: to study the post-chronic renal failure changes in morphological and morphometric indicators of the liver of fetal rats without a white breed.

Results from the experiment:



Morphological structure of liver tissue. Paint G-E. EU 10x10 OK.

1. Deformation of the central venous wall, fullness with an enlarged cavity .
2. Small volumetric vacuoles (droplets . hepatocytes-the nucleus is in the center, basafil painted.
3. The sinusoid space has an enlightened, fullness and narrating of the space in the perisinusoidal area (disse)
4. Kupffer cells and binuclear hepatocytes have increased numerically.



Morphological structure of liver tissue. Paint G-E. EU 10x10 OK.

1. Deformation of the central venous wall, fullness with an enlarged cavity .
2. In the cytoplasm of hepatocytes, small volumetric vacuoles (drops hepatocytes - the nucleus is in the center, basafil painted).
3. The sinusoid space has an enlarged , fullness and narrowing of the space in the pericinusoid area (Disse).
4. Bicellular hepatocytes and Kupfer cells have increased numerically.

Conclusion: in our experiment, we studied morphological and morphometric indicators of the liver of fetal white-breed rats. We can see a general venous fullness in the central vein, a deformation of the central venous wall, a fullness with an enlarged cavity, as a result of a slowdown in the circulation of venous blood. The consequence of this is the expansion of the sinusoid space , fullness and narrowing of the cavity in the pericinusoid area (disse). Narrowing of the disse cavity directly affects the processes of metabolism, slowing down these processes. Processes such as slowing down the exchange of substances in the liver ,hypoxia are obvious evidence of uneven thickening of light pink collagen fibers around the central vein. Hypoxia has a direct effect on the functional state of hepatocyte - cell structures . Small volumetric vacuoles(droplets) appeared in the cytoplasm of hepatocytes .This process led to a slight violation of the water-electrolyte balance inside and outside the cell. It was found that fluid in the form of vacuole drops passed into the hepatocytes. In this, hepatocytes - the nucleus is in the center, basafil is painted. The cytoplasm is eosinophilic stained, wide in size. The dimming of the blood increases the agglutination of erythrocytes, and this led to an increase in the Kupfer cells (the function of which was described above) in the sinusoid wall. We can see that regenerative regeneration processes are enhanced as the body's capacitor

processes increase numerically between hepatocytes with bilucleated hepatocytes.

There is another star-shaped cell in the Disse cavity. The function of the ITO cell is the accumulation of vitamin A and fat-soluble vitamins. Synthesis of extracellular matrix i.e. is converted to myofibroblasts in the wound.

Liver slices are the structural functional unit of the liver. In the middle of each lobule is the central vein (Vena centralis). The sinusoid capillaries and liver plate are radially oriented to the central vein. The liver fragments are separated by a cross-hepatic intercostal connective tissue, and a hepatic triad localizes in this area.

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