

## **MORPHOLOGICAL CHANGES IN THE LIVER OF OFFSPRING BORN TO MOTHERS IN A STATE OF EXPERIMENTAL STRESS**

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**Annotation:** The article scientists who have studied the effect of stress on the structure and function of the liver have conducted a number of studies. Stress is a universal naspecific neurogормональ reaction of the body in the form of an injury that manifests itself with increased body resistance, or a voltage of non-specific adaptation mechanisms in response to a signal that threatens the life or well-being of the body.

**Key words:** stress, liver, white laboratory rat, morphological indicator.

Stress is a universal nonspecific neurohormonal reaction of the body in the form of a surge of nonspecific adaptation mechanisms in response to a signal that threatens the life or well-being of the organism, manifested by an increase in the body's resistance or damage [1,2]. High levels of cortisol and other stress hormones in the blood due to chronic stress increase inflammation in the liver cell [1]. This causes liver fibrosis.

**The purpose of the study.** Study of morphological changes in the liver of offspring born to mothers in a state of experimental stress.

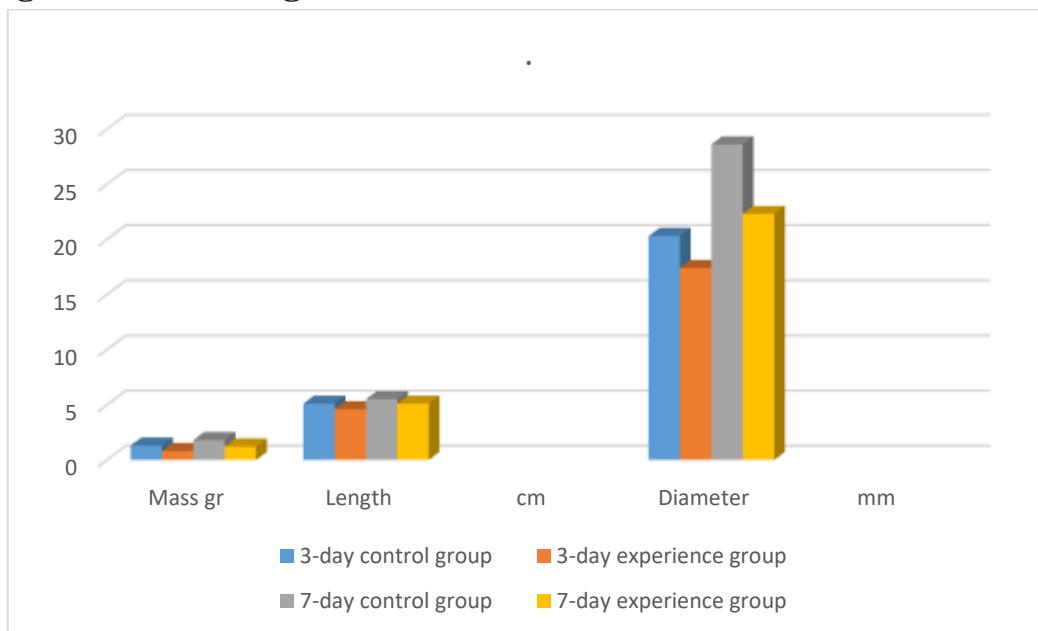
**Research materials and methods.** 120 white laboratory rats are used to reach the target. White laboratory rats are divided into 2 groups. Group 1 constitutes the healthy rats control group. Mother rats in the control group are given 1.0 ml of saline solution in the stomach every morning. An underarm catheter is used as a probe. Rat babies are lifeless under ether narcosis on 3, 7, 14, 21, 30 days after birth. Group 2 is an experimental group, and in 50 white laboratory rats of the female sex, they are stored in specially prepared labyrinth cages to call experimental stress. This model of stress is continued Once the rats become pregnant and after the birth of their child.

**Results of the study:** To achieve the goal, 50 white laboratory rats weighing 160-180 grams are used. White laboratory rats are divided into 2 groups. Group 1 consists of 20 healthy rats as a control group. Pregnant rats in the control group are given 1.0 ml of saline solution into the stomach every morning. A subclavian catheter is used as a probe. Group 2 is the experimental group, and 50 pregnant white laboratory rats were kept in specially prepared maze cages to induce experimental stress. Stress is induced in pregnant rats in the cage using factors such as bright light, cold and hot temperatures, and food deprivation. Several methods are used to achieve the result: general histological method, organometric, morphometric. After the pancreas is separated after the opening of the abdomen, the length, width, thickness of

the organ are measured. These dimensions of the Jihar are measured using a stencil (diagram 1). Measuring the weight of the liver of rats and rats, three electric scales are used.

Diagram 1

**Organometric changes in the liver of rats are shown in the table below**



During the study, morphological changes in liver tissue were found, in particular, inflammation, necrosis and changes in cell structure. These results provide new information on the effects of stress on liver function and its features during pregnancy. The results of this study can serve as an important scientific basis for the prevention and treatment of stress-related diseases in pregnant women.

**Conclusion. 1.** At the same time, in most areas, lymphoid cells are distributed evenly.

2. The size of the segments was also reduced in length and diameter, and in some cases, necrosis was observed.

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