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16<sup>th</sup> April, 2025

## **MORPHOLOGICAL CHANGES IN THE LIVER IN RATS IN THE STATE OF EXPERIMENTAL STRESS, BORN AT DIFFERENT PERIODS**

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### **Annotation:**

Despite numerous evidence showing deviations of various immunological parameters characterizing the functional state of individual cell populations of the immune system during stress response, to date, quantitative analysis of structural and functional changes of the thymus and talok from lymphoid organs has not been carried out in the cross section of generations.

**Keywords:** morphological indicator, experimental stress, liver, white laboratory rat.

This makes it possible to identify the “weak” joints of the lymphoid system, which can be damaged by stress, and deepen modern knowledge of the mechanisms and biological significance of the phenomenon of involution of lymphoid organs by generations exhausted under stress [1,2]. High levels of cortisol and other stress hormones in the blood due to chronic stress increase inflammation in the liver cell [1].

**The purpose of the study.** Methods for studying morphological changes in the liver in rats in case of experimental stress born at different periods.

**Research materials and methods.** 130 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 45 white laboratory rats of the female sex, they are



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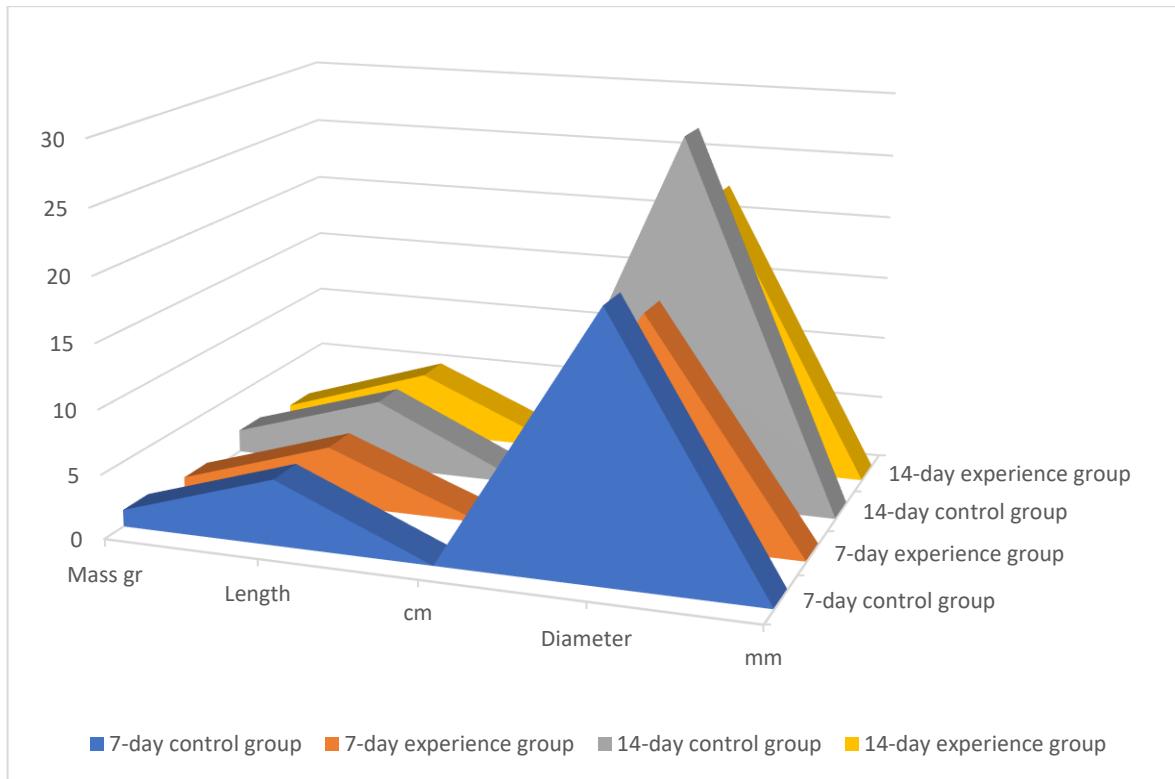
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stored in specially prepared labyrinth cages to call experimental stress. This model of stress is continued Once the rats become pregnant and after the birth of their child.

**Results of the study:** To achieve the goal, 45 white laboratory rats weighing 165-185 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**





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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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