

CHANGES IN THE MICROFLORA OF THE LARGE INTESTINE OF LABORATORY ANIMALS AFTER THYMECTOMY

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Relevance of the study. In recent years, secondary immunodeficiency has been developing under the influence of various endogenous and exogenous factors, which indicate violations of the immune system. The clinical and immunological aspects of this condition are described in numerous scientific sources, but the microbiological aspects concerning the normal microflora of the body's biotopes are not described sufficiently. In addition, there is little data on the degree of influence of immune system cells on the microbiocenosis of the body's biotopes.

The aim of the study was to analyze and evaluate the results of studying changes in the microflora of the large intestine of white mongrel rats after thymectomy in an experiment.

To solve this issue, we conducted experimental studies on white mongrel rats, the essence of which is to study the degree of influence of immunity on the quantitative and qualitative composition of the normal microflora of the large intestine. The reason for choosing these experimental animals is that the structure and functioning of the organs and systems of these mammals are very close to the human body, in addition, the structure, formation, and development of the immune system in mammals are close to each other. In addition, these experimental animals are not expensive.

For the experiment, a method was chosen to exclude one of the central organs of the immune system of experimental animals – the thymus (thymus gland).

To carry out the research work, 135 white mongrel male rats weighing 160-180 g were involved, kept in standard vivarium conditions - temperature 21-22°C, relative humidity is 50-60%, light mode for 12 hours of darkness and light. The maintenance of laboratory animals, feeding and caring for them, selection of animals, cleaning and disinfection of the vivarium premises were carried out according to the methodological manual of Nuraliev N.A. et al. [1.3.5.7.9].

When working with experimental animals, all ethical principles of working with laboratory animals and rules of biological safety were observed.

To conduct experimental studies, all animals (n=135) were divided into the following groups:

The main group is white mongrel rats who had a thymectomy, n=60;

The comparison group was white mongrel rats, in which surgery was performed, but the thymus was not removed (falsely operated), n=60;

The control group consisted of intact white mongrel rats that had not undergone surgery and thymectomy, n=15;

The main group and the comparison group, in turn, were divided into the following subgroups: O1 (n=20), O2 (n=20), O3 (n=20) and C1 (n=20), C2 (n=20), C3 (n=20), where animals They were sacrificed for research after 1 month (O1 and C1), 3 months (O2 and C2) and 6 months (O3 and C3) after thymectomy and false surgery.

Thymectomy in adult white mongrel rats was performed according to Victoria R.Rendell et al. (2014), which is a simple rat thymectomy method that uses mini sternotomy and endotracheal intubation [2.4.6.8].

Conclusion. In all laboratory animals, after killing, biological material for bacterial studies was taken from the large intestine (intestinal contents). All bacteriological studies were carried out using generally accepted bacteriological methods. The description of the state of the normal microflora of

the large intestine began with intact rats, since the normal value of intestinal microbiocenosis is needed as a comparison of data with the main group and the comparison group.

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