

primary infertility in women of reproductive age with HD and obesity in puberty, relative to overweight was > 1 (RR = 1.08; 95% confidence interval 0.5-2.1), of secondary infertility > 1 (RR = 1.3; 95% CI 0.5-3.4). Similar studies, which determined the risk of obesity in puberty, relative to normal body weight, showed an increase of infertility the risk in 4 times [6].

Conclusion. It was found that the decrease in body mass (by BMI) in reproductive age, relative to puberty, occurred in 73.3% of women of reproductive age with HD in puberty, the BMI has not changed at 17.4%, an increase in BMI > 30.0 kg/m² was found at 9.3% of examinees.

It was identified the RR of primary infertility in women of reproductive age with HD in puberty and obesity, relative to overweight, was > 1 (RR = 1.08; 95% confidence interval 0.5-2.1), of secondary infertility > 1 (RR = 1.3; 95% CI 0.5-3.4).

It was determined a set of predictors, which allows to predict the presence of a normal body mass (BMI 18-24,9 kg /m²) in reproductive age in women with HD in puberty, the predictors are arranged in descending order: chronic tonsillitis, abnormal uterine bleeding in puberty, brain ischemia in neonatal period, herpetic infection and diffuse endemic goiter in puberty, the threatened miscarriage in the mother during the first trimester.

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HISTOCHEMICAL CRITERIA OF MORPHOMETRIC CHARACTERISTICS OF THE LEFT LUNG IN RATS WITH TOTAL COOLING OF THE BODY

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Morphometric characterization of the respiratory part of lungs reflects the complexity of the ventilation-perfusion relationships in the lungs acinus [1]. Opening the chest is an obligatory stage in lung morphological studies. Therefore, morphological dissection leads to the development of lung atelectasis. It in turn, casts doubt on the results of the study of the respiratory part of lungs [2]. The purpose of the research is to study criteria of histochemical features of morphometric parameters of the respiratory part of the left lung in rats.

Research methods. The study was conducted on male rats aged 4 months body weight 300-350, grams aged in an amount of 20 pieces. Created the following groups: Group 1 - intact, 2 group of rats was exposed to cold exposure at -10 ° C for three hours. for 10 days. After slaughtering of the chest rats left lung removed. Light rats were fixed in formol calcium. Pieces of light embedded in gelatin. Pulmonary cryostat sections were made. Histological sections were stained with an alkaline solution of Sudan black B.

Results of the study. We conducted a study organometric left lung in rats. Block diagram showing the method of analysis organometric left lung is shown in Fig. 1 and Fig 2. Fig. №1 is a diagram of the medial sur-

face of the left lung of rats. Fig. №2 is a schematic cut caudal lobe of the left rats.

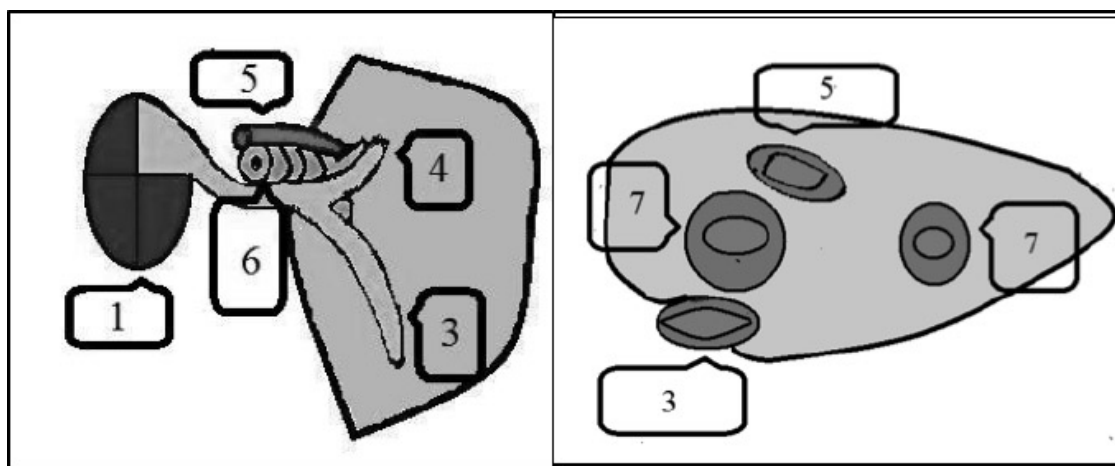


Fig.1

Fig.№2

1. Heart. 2. The left lung. 3. Caudal left pulmonary vein. 4. Cranial left pulmonary vein. 5. Pulmonary artery. 6. The main bronchus of the left lung. 7. Caudal bronchus and his generation.

The results are given in Table №.1. We have found that when the total cooling body organometric change characteristics of the left lung of rats. The data obtained from say that there is a significant tendency to change the degree of lightness in the case of rat lung cold stress.

When histochemical and morphometric study, we have confirmed the results of the study organometric left lung of rats. We conducted histochemical detection of localization of phospholipids, which was carried out by staining with alkaline Sudan black B slices of rat left lung filled in gelatin. When contact histochemical study was set high information evaluating lung sections stained with Sudan black B. We have found that colored with sudan black B diffuse material (Fig. №3) present in the alveolar portion. It seems that phospholipids completely fill the lumen of this part of the alveoli.

Tab.1.

Parameter	group 1	group 2
	Control	Cold 10 days
Length caudal pulmonary vein (mm)	12,9±0,4	14,7±0,3 P (1-2) < 0,01
The thickness of the caudal lung Vienna (mm)	1,1380±0,041	1,41±0,04 P (1-2) < 0,01
Left lung Thickness (mm)	5,110±0,033	6,150±0,41 P (1-2)<0,05
Left lung Width (mm)	11,3±0,42	12,5±0,7 P (1-2) >0,05
Left lung Length (mm)	25,66±0,8	2,6±0,08 P (1-2) >0,05

In the study of pulmonary artery it noted that its wall is represented by several layers of circularly arranged membranes diffusely stained with Sudan membrane (Figure 4). In the study of the caudal wall of the pulmonary vein to detect the presence of fibrillar structures, which form the 1-circular inner layer 2 and an outer oblique circular (Fig. 5). With the general cooling of the body there is an increase in phospholipid content of multiple-row cylindrical epithelium that covers the surface of bronchial mucosa (Fig. №6). Received at the histochemical study of morphometric data objectifies lung study (Tabl. №2).

The findings support the hypothesis of informativeness organometric assessment of the left lung of rats in the case of experimental exposure to adverse environmental factors [1,2].

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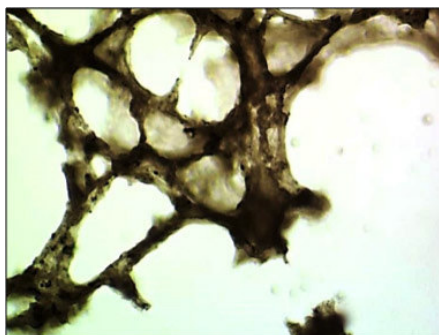


Fig. № 3. The alveoli containing phospholipids. Cryostat sections of the lungs. Ochre. Sudan black B. Magnification × 600

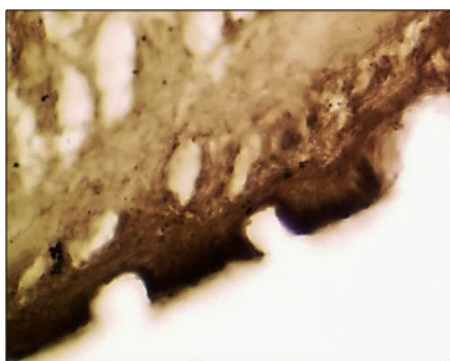


Fig. №4. The mucous membrane of the bronchi. Cryostat sections of the lungs. Ochre. Sudan black B. Magnification × 600.

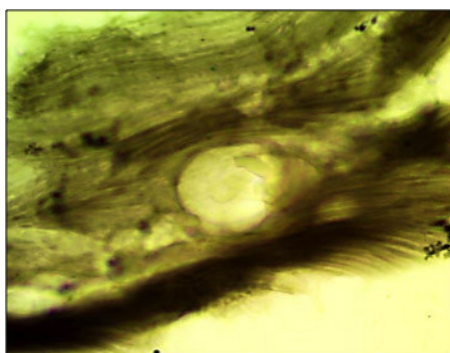


Figure 5. The wall of the caudal pulmonary vein of the left lung cryostat sections of the lungs. Ochre. Sudan black B. Magnification × 600

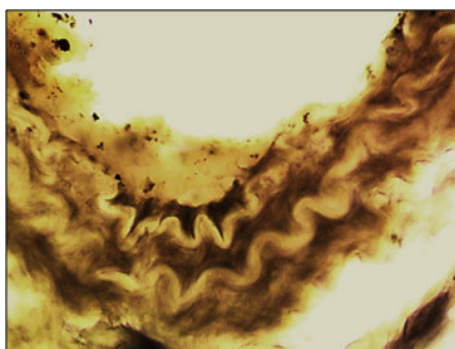


Fig. №6. The wall of the pulmonary artery of the left caudal lung. Cryostat sections of the lungs. Ochre. Sudan black B. Magnification × 600.