

We can identify leiomyocytes and interstitial matrix increase after using monoclonal antibodies to smooth muscle actin (Fig. 3). The intercellular substance changes in childbirth are one of the most important morphological aspects of cervix "maturation".

Conclusion. We found that during late pregnancy and vaginal birth in myometrium inner layer bright and hypertrophied small myocytes were dominated. Reactive changes in sphincter cervical cells during late pregnancy and childbirth can be regarded as a variant of differentiation and cell specialization. Clasmacytosis phenomenon, detectable during childbirth contributes to changing the qualitative and quantitative composition of the intercellular substance. It prepares the cervix for childbirth and also myocytes cytoplasm utilization during postmature involution.

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INFLUENCE OF SELENITE OF SODIUM ON PHYSICAL EFFICIENCY OF RATS IN THE CONDITIONS OF INTENSIVE PHYSICAL ACTIVITIES

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The intensive physical activities (PA), having accompanied the sports activities, are usually

being led to the fatigue and sharp decline further development in performance. So, it is expected, that the sodium selenite use, the antioxidant properties of which have already been shown by us earlier at IA (Kornyakova V.V., Konvay V.D., 2013), can be increased the intensive physical activities (PA).

The PA have already been modeled on the male albino rats, by the forced swimming test method with the 10 % load of the body weight (e.g. Kornyakova V.V., and et.al., 2007). Then, the rats' swimming has been conducted in the 60 cm deep special pool, and with the 28–30 °C water temperature in it. Thus, the three main groups have already been examined: the first one – to the optimal mode PA (OA), having swum with the load every other day during the five weeks (e.g. 35 days) of the experiment, the second one – with the PA (IA), intensive regime, having swam with the load during the first three weeks (e.g. 21 days) of the experiment in a day, and the last two weeks (e.g. 14 days) – every day, the third one (IA + C) – swam by the IA scheme, in the last week of the experiment personally received orally sodium selenite at the 30 mg/kg body weight before their swimming. They, moreover, have measured the rats' swimming time, jumping numbers, then they have recorded the electrocardiogram (ECG) at the end of the experiment.

In addition, it has been found, that rats, having subjected to the forced swimming with the load in the IA + C mode, have been characterized by the increased PA, and the cardiovascular system adaptivity to the PA, in comparison with the IA group animals. Thus, the rats' swimming time of the IA + C is practically higher up to 116,9 % (e.g. $P = 0,001$), and the jumping number – by 110,0 % (e.g. $P = 0,009$), in comparison with the IA group animals. It has been experienced the indicator decline of the rats' stress index of the IA + C group for by 30,2 %, in comparison with the IA group animals (e.g. $P = 0,02$) in the heart rate analysis (e.g. by R.M. Baevsky). So, all these indices in the IA + C group rats have not statistically and significantly been differed from the similar parameters in the OA group animals.

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