

the body, i. e. apoptosis. However, the mechanism of launching and implementing glucocorticoid -induced apoptosis remains largely unclear. The effect of glucocorticoids on target cells is carried out mainly at the level of gene transcription regulation. There is also the evidence that the start-up phase of such cooperation is the formation of the complex with specific membrane hormone regulatory protein-receptor. In this case, an important role in modifying signal transmission inside the cell, apparently, can play a radiation-induced damage to the plasma membrane affecting its lipid and protein component.

Of particular interest there are studies indicating that calcium ions may play a role marker glucocorticoid – induced apoptosis of thymocytes and lymphoid cells. It is expected that the increase in intracellular calcium concentration in cytoplasm appears to be the only trigger Ca^{2+} -mediated cell death.

The aim of this work was to study the homeostasis of calcium ions in the midst of glucocorticoid -induced apoptosis of thymocytes in rats on the 30th day after exposure to chronic (exposure at a dose of 1. Experiments were conducted on thymocytes and irradiated rats. For the measurement of intracellular Ca^{2+} concentration ($[\text{Ca}^{2+}]_i$) were using fluorescent probe Fura-2AM (Molecular Probes, SIGMA).

It was found that intracellular cytoplasmic Ca^{2+} ion concentration increases at the time of incubation with dexamethasone. The visible effect of GIBBERELLIC ACID on the levels of Ca^{2+} ions in the thymocytes occurs after 15 minutes of incubation with the above link (20 %). The most significant persistent increase in concentrations of $[\text{Ca}^{2+}]_i$ is approximately 1,5 times compared with controls; there is through incubation 1:00 with this product.

Preincubation for 1:00 suspension thymocytes control animals with dexamethasone resulted in an increase in the concentration of calcium ions in cytoplasmic cells approximately 2 times. However, on the 30th day after chronic exposure at a dose of 1 g in the cytoplasm of rat thymocytes declining concentrations of cytoplasmic calcium ions by almost 40 % compared with control cells irradiated suspensions interactions of animals with dexamethasone in the above conditions also caused an increase in the concentration of calcium ions in the cytoplasm. However, there was only 50 % from the original values.

The results obtained in this work seem to be able to provide further disclosure of important problems related to the breakdown of the molecular mechanisms of action of glucocorticoids in the cells of the immune system that may eventually help to address the issues of violation of adaptive systems of the body when exposed to ionizing radiation.

PSYCHOLOGICAL PECULIARITIES OF PREGNANT WOMEN

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The psychological profile of pregnant women suffering from arterial hypertension is characterized by a tendency to psychosomatic reactions, the expression of anxiety at the somatic level, disadaptive in the experiences of stressful situations. As a result of psychological testing, it was found that pregnant women with hypertension have a high level of anxiety and stress.

Keywords: pregnancy, arterial hypertension, psychological state, reactive anxiety, stress.

It is known, that even physiological pregnancy is influencing psychological state of women. Several authors consider pregnancy as crisis.

Arterial hypertension is one of the main reasons of complications as for mother and for fetus. These complications sometimes may be mortal.

Last investigations lead to conclusion, that many complications in pregnancy have psychosomatic origin. In addition, psychoemotional tension plays very important role in the development of psychosomatic disturbances.

The aim of research was to analyze the psychological state in pregnant women.

We tested 60 women: 20 pregnant women without arterial hypertension; 20 pregnant women with arterial hypertension being developed during pregnancy; 20 healthy women of fertile age (medical workers).

The psychological state was investigated with the help of Spilberger Trait Anxiety Inventory (trait and reactive anxiety) and with Holms and Ray stress scale.

Pregnant women with arterial hypertension had reactive anxiety level distinctly higher then healthy women from control group ($45,7 \pm 1,3$ and $38,0 \pm 1,7$, $p < 0,001$). In addition, most of the pregnant women with arterial hypertension had high levels of reactive anxiety. None of them had low levels of reactive anxiety.

Pregnant women with arterial hypertension had in the most cases high levels of reactive anxiety (in 70 % of cases). Most of the pregnant women with arterial hypertension and healthy ones had middle levels of reactive anxiety (in 60 % of cases).

No difference in levels of trait anxiety between pregnant women without arterial hypertension and pregnant women with arterial hypertension was noticed ($47,5 \pm 1,0$ and $49,2 \pm 1,2$). However, these levels are appraised as high.

Most of the women in all groups, even healthy ones, had high levels of trait anxiety (pregnant women without arterial hypertension and group with arterial hypertension 70 %; healthy women medical workers 60 %).

Stress level was highest in the group of pregnant women with arterial hypertension ($221,1 \pm 26,7$). This level was distinctly higher, than in pregnant women without arterial hypertension ($165,2 \pm 15,3$, $p < 0,05$). It is interesting, that healthy women (medical workers) had higher stress level, then pregnant women with arterial hypertension ($194,5 \pm 23,1$).

The data of psychological examination indicated that pregnant women with arterial hypertension being developed during pregnancy have high levels of trait anxiety and stress. Therefore, they need psychological rehabilitation.

THE ANALYSIS OF THE EPIDEMIOLOGICAL ASPECTS OF ABORTION

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The methods of analyzing epidemiological aspects, the impact of various social factors that have changed the position of women, the issues of carrying out activities on the level of abortions are considered.

Keywords: reproductive system, abortion, fertile age, childbirth, contraception, epidemiological aspects of abortion.

The social transformations that took place in the world over the past decades significantly changed the position of the woman, contributed to the growth of her economic independence and psychological independence. According to the numerous studies, urbanization, industrialization, the increasing employment of women, creative attitudes to the career are in inverse correlation with the birth rate. Studies and a later onset of professional maturity often cause the desire to temporarily postpone the birth of a child with a positive attitude towards motherhood. In this respect, the tendency of conscious regulation of procreation is becoming more and more evident. However, a certain part of women uses the artificial termination of pregnancy for this purpose, and not to the prevention of it by modern reliable contraceptives.

The objective of the study is to conduct the analysis of the epidemiological aspects of abortion in the Republic of Belarus using quantitative methods of assessment,

The subject of the study was statistical reporting data on the number of abortions performed in the Republic of Belarus per 1,000 women of childbearing age as well as per 100 births.

The analysis of the statistical series by the method of the first-order parabolic curve graduation of the number of abortions per 100 births in the Republic of Belarus (1995–2016) made it possible to reveal the statistically significant tendency towards a decrease in the indicator over the period under analysis ($R^2 = 0,93$, $A_1 = (-8,9) \%$). A stable tendency to decrease the indicator for 1000 women of fertile age ($R^2 = 0,89$, $A_1 = (-3,0) \%$) was also identified. It was revealed that Grodno region has the lowest percentage in the number of abortions performed. Significant difference in the decreasing number of abortions performed in the Republic of Belarus in 2016 in comparison with 1995, calculated for 1000 women of fertile age ($t = 9,81$, $p < 0,01$) and for 100 births ($t = 5,7$, $p < 0,01$). There is a 6-fold decrease in the absolute number of abortions carried out in the Republic of Belarus at the end of the study period compared to the beginning. In all regions, as well as in the whole of the Republic of Belarus, there is a decline in the number of abortions per 100 women of childbearing age and per 100 births for the period from 2011 to 2016. The lowest number of abortions per 100 births in 2016 was registered in Minsk region, 13,8 %; the highest number was registered in Minsk – 33,1 %. The lowest number of abortions per 1000 women of childbearing age was also registered in Minsk region – 8,4 %, whereas the highest was in Gomel region – 17,9 %.

The formation of the young women's attitude to the family and childbearing, the improvement of the level of health habits and knowledge about the basic processes in the formation and functioning of the reproductive system not only among girls themselves but also among their parents and teachers are included in the list of priority social