

All patients received the following treatments:

- Antiviral therapy in recommended doses (neuraminidase inhibitors Relenza, Tamiflu).
- Antibacterial therapy: cephalosporins III and IV generations, azithromycin, carbapenem, vancomycin, zivoks.
- Respiratory support: inhalation of oxygen required wet 7 women, non-invasive ventilation in CPAP mode received 3 women, artificial lung ventilation 1 conducted a pregnant.
- Bronchodilator therapy included inhalation of salbutamol/berodual via the nebulization and oral mucolytics.
- Physical therapy, therapy of obstetric complications.

The average length of hospitalization accounted for 17.5 days. With recovery issued 33 women, 5 women formed post pneumonic pulmonary fibrosis was 1 death 1 patient group with very heavy over total pneumonia and formation of distress syndrome adult.

Conclusions

1. Influenza A/H1N1swl in pregnant women is leaking heavily and is accompanied by a high rate of complications as pneumonia, respiratory distress syndrome, placental insufficiency and the formation of post pneumonic pulmonary fibrosis in the outcome.

2. In pregnant women with viral-bacterial pneumonia occurred against the backdrop of heavy currents influenza A/H1N1 swl, you must apply the causal combination therapy: Relenza, oseltamivir treatment with antibiotics. One of the criteria for the effectiveness of the treatment is the dynamics of Leukocyte formula (an increase in the percentage of neutrophils).

3. During the stages of intensive therapy, it was necessary to evaluate the hemostatic system and to make corrections identified hemocoagulation violations.

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THE USE OF ADAPTOGENIC HERBAL PRODUCTS FOR THE CORRECTION OF HEAT AND COLD STRESS ON THE BODY

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Abstract The purpose of this research was to study the possibility of using a mixture food products from *Hypericum perforatum* and *Rhodiola rosea* for the stimulation of the body's compensatory responses to the conditions of high and low temperatures.

Key words: adaptogens, resistance of organism, cold stress, heat stress.

The human activities in the climatic conditions of cold and heat are one of the most important problems of modern biomedical science.

A perspective direction in regulation of metabolic processes in conditions of high and low latitudes is pathogenetically justified anticold and antiheat preventive nutrition with the use of adaptogens, which can be considered as one of the most important factors contributing to the stimulation of compensatory reactions of the organism, in terms of functional deviations is determinative.

In recent years there has been a clear tendency to create new adaptogenic products with added ingredients of bee, sea, vitamins, etc., which have antioxidant and antihypoxant properties and have been used successfully for the correction of cold and heat [5].

In respect of food products, possessing these properties, a very promising blend of adaptogens of plant origin – *Hypericum perforatum* (HP) and *Rhodiola rosea* (RR).

It has been established that HP and RR are similar in their chemical and biological properties.

Investigations on the exclusion of the toxicity of a mixture of HP and RR have been conducted in accordance with generally accepted methodological approaches [2,3]. The experiments were performed on experimental animals (white rats and rabbits) with identification of integral, physiological, hematological and histological indices recommended for such investigations.

Table 1

Periods of research	Group of animals			
	Control		Experimental	
	Erythrocytes	Leukocytes	Erythrocytes	Leukocytes
	$10^{12}/\mu\text{m}^3$	$10^9/\mu\text{m}^3$	$10^{12}/\mu\text{m}^3$	$10^9/\mu\text{m}^3$
Background	6,86±0,48	7,29±0,49	6,82±0,32	7,58±0,53
1st day	6,71±0,49	7,68±0,38	6,74±0,54	7,52±0,38
15th day	6,83±0,51	7,70±0,34	6,69±0,29	7,44±0,56

The content of mineral elements in a mixture of HP and RR

Note: CBA – coefficient of biological accumulation.

The animals were divided into control and experimental groups of 10 animals each. All animals were provided with a double control due to the presence of the control group and data recording before starting the experiment.

The research of organoleptic and microbiological properties of a mixture of HP and RR indicates the absence in it of toxic substances, pathogenic microorganisms and their toxins, which confirms the harmlessness of the mixture to a warm-blooded organism. In acute experiments the mixture of substances from the HP and RR no deaths were caused. According to the hazard classification of substances according to the degree of impact on the body (SS 12.1.007-76) studied the mixture should be classified as the 4th class of low hazardous substances. The investigation of the sensitizing properties of the mixture of HP and RR indicates the absence of allergenic activity.

A mixture of HP and RR was administered orally and intraperitoneally to each group of animals. Biochemical and morphological investigations of the blood of experimental animals at the 1st and 15th day of the monitoring were conducted. It was revealed that red blood cells, white blood cells did not have significant deviations compared with the control group.

Table 2 (right)

The content of leukocytes and erythrocytes in the blood of white rats after intragastric intake of a mixture of HP and RR (5 animals in each group at each stage of the research)

The organs of decapitated animals did not have pathological changes. These results indicate that in the composition of the powdered food mixture of HP and RR

Element	<i>Hypericum perforatum</i>	<i>Rhodiola rosea</i>
Tannins, %	10-12	20
Ash, %	4,21	11,42
K, mg/g	16,8	5,7
Ca, mg/g	7,3	10,8
Mn, mg/g	2,2	1,7
Fe, mg/g	0,11	0,8
Mg, CBA	0,25	0,13
Cu, CBA	0,34	0,08
Zn, CBA	0,71	0,16
Co, CBA	0,21	-
Mo, CBA	5,6	2,0
Cr, CBA	0,01	0,11
Al, CBA	0,02	0,54
Se, CBA	5,0	26,0
Ni, CBA	0,18	0,28
Sr, CBA	0,18	0,38
Cd, CBA	7,2	-
Pb, CBA	0,08	0,04
I, CBA	-	0,15
Ba, CBA	-	0,15
V, CBA	-	0,49
B, mkg/g	40,40	33,6
Cobalt	Not found	Not found
Mercury	Not found	Not found

there are no toxic substances, it is safe according to the criteria of ecological and hygienic human nutrition concept.

Antioxidant effects in the organism of white rats have been studied at the initiation of the processes of lipid peroxidation by the introduction of carbon tetrachloride. We were determined the products of lipid peroxidation for the evaluation of antioxidant effect in accordance with generally accepted methodological approaches. Research of cold and heat adaptation reactions of experimental animals have been conducted by using the model of a long cold and heat action with appropriate climatic chambers. In rats we were determined the physical performance (swimming, performance on the treadmill), biochemical values of the antioxidant activity of plasma to research the protective effect of a mixture of HP and RR during cold and heat influence [1].

The studied mixture (when it admission in doses of 150-300 mg/kg daily) increases the resistance animals to fatigue in the process of adapting to the cold and heat.

Thus, complex experimental researches give reason to recommend the powder blend of adaptogens from HP and RR as antihypoxic and anti-oxidants to prevent adverse effects of cold and heat stress on the body.

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FEATURES OF CLINICAL COURSE, TREATMENT AND PREVENTION OF BRONCHIAL ASTHMA DURING PREGNANCY AT THE MODERN STAGE

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Abstract The aim is to study the clinical course, the features of treatment of asthma in pregnant women and prevention of exacerbations. Having analyzed 85 pregnant women with asthma at various stages of gestation, it was found that the average duration of disease, was more than 10 years, with more frequent bronchial asthma mild persistent currents, allergic form. As for the level control, which at the moment makes the GINA (2016), pregnancy reduces it. Most pregnant women refer to a group with partially uncontrolled or uncontrolled asthma.

Key words: bronchial asthma, pregnancy, clinical course, treatment.

Bronchial asthma (BA) is one of the common diseases of the pulmonary system, and takes the first place in the structure of allergic diseases in pregnant women. According to the Institute of Immunology in Russian asthma suffer from 2% to 18% of the population. The prevalence of asthma among pregnant women in Europe is around 4%, the morbidity of asthma among pregnant women in the Russian Federation range from 0.4-1.3% to 5.2%. Consideration of mutual influence of bronchial asthma and pregnancy remains relevant in connection with growth of frequencies of asthma, high percentage of obstetric complications, adverse perinatal outcomes, high morbidity of newborns and children. Difficulty of asthma early detection in pregnancy and selection of therapy dictate the need for increased diagnostic capabilities and search tools for monitoring the effectiveness of treatment.

The aim of work - study of the clinical course, the features of treatment Asthma in pregnant women and prevention of exacerbations.

Material and methods. Have been analyzed the clinical course of asthma in 85 pregnant women with an average duration of disease, respectively, $9,7 \pm 2,5$ years and $7,5 \pm 2,3$ year. According to the perinatal center of Blagoveshchensk, women's consultations of Blagoveshchensk, city maternity home of Blagoveshchensk.

Among the examined 85 pregnant women at 62.1% of the patients had Asthma prevailing light current