

IMPACT OF THE PHYTOPREPARATUS APUSET-6 ON THE ENDOCRINE PANCREAS-THYROID AXIS

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Thyroid hormones influence multiple metabolic processes through changes in the concentration and activity of many enzymes, the metabolism of substrates, vitamins and minerals, the rate of secretion and inactivation of other hormones and the response of target organs. Thus, the prophylaxis of the thyroid gland prevents a series of severe autoimmune diseases. In addition to drug treatment, naturist medicine is becoming more and more widespread, in order to maintain the positive effects after treatment or as a prophylactic method at an early stage. Scientific research confirms positive actions in the treatment of the endocrine-thyroid pancreatic axis. Thus, new horizons are opened in the practice of therapy and treatment of endocrine pathological conditions.

Purpose was to highlight changes in physiological indices in endocrine-thyroid pancreatic disorders in white laboratory rats against the background of APUSET-6 biopreparation.

Research object - the white laboratory rat. The model of the experimental hypothyroidism - by administering the solution of potassium thiocyanate, in a ratio of 20 mg per 100 g of body mass. The biopreparation consists of the following plants: *Anethum graveolens*, *Plantago major*, *Urtica dioica*, *Salvia officinalis*, *Equisetum arvense*, *Thymus serpyllum*.

This study highlighted the pathological effect of hypothyroidism on the body, which is manifested by disorders in all organ systems, and in late states - coma and death. Research has shown that interdependence between hypothyroidism and diabetes mellitus results in the determination of insulin hyposecretion (2.07 ± 0.17 pmol/l after administration of K⁺ thiocyanate compared to the initial concentration of 2.58 ± 0.21 pmol/l), a fact that conditions the increase in blood glucose levels (6.4 ± 0.34 mmol/l in pathology and 4.0 ± 0.22 mmol/l in the control group). The analysis of the leukocyte formula showed an increase in all indices against the background of hypothyroidism in the white laboratory rats. These changes indicate that changes in cellular immunity are closely related to the pathological conditions of the thyroid gland.

Experimentally, it has been shown that the administration of APUSET-6 biopreparation has a high efficacy in the prophylaxis of thyroid dysfunction, thus protecting the affected body from hypothyroidism, diabetes and acute infections, by maintaining hematological indices within the norm.

Keywords: endocrine pancreas-thyroid axis, Apuset-6 biopreparation, physiological indices, pancreatic disorders, hypothyroidism, diabetes mellitus.