



3. Using the proposed method to determine the reliability of the expert's conclusions will provide an opportunity to increase the objectivity and accuracy of forensic diagnostics of death from hypothermia.

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## **THE SEVERITY OF FATIGUE SYNDROME IN CANCER PATIENTS AFTER COMBINED ANTITUMOR TREATMENT**

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**Introduction.** Oncological diseases constitute a significant medical, psychological and psychosocial problem. Progress, which occurred in the diagnosis and treatment of malignant neoplasms, increased the overall survival of cancer patients. However, a high level of psychological stress, a pessimistic perception of the prospects for treatment provoke the development of fatigue syndrome, which adversely affects the health status and treatment of patients. In this regard, the identification of the development of this syndrome and the timely conduct of therapeutic and preventive measures to prevent its development is an actual direction of modern medicine.

The aim of the work is to evaluate the severity of fatigue syndrome in patients with uterine body cancer (UBC) before and after combined antitumor therapy.

**Materials and methods.** Clinical and laboratory studies were conducted in 46 patients with the diagnosis of adenocarcinoma UBC before and after the combined treatment (panhystectomy, radiation therapy). A study of hematological parameters was performed using the hematological analyzer SF-3000 (SYSMEX, Japan). The study of the concentration of cortisol in the blood serum was performed by an enzyme immunoassay using the Steroid-IFA-Cortisol-01 reagent kit (Alkor Bio, Russia). Evaluation of the degree of psychosomatic abnormalities in UBC patients was carried out with the help of a questionnaire (EORTC QLQ-C30 test) (Fayers P.M., 2001).

**Results.** Results of the study of hematological parameters of patients before and after the treatment showed a decrease in the number of lymphocytes, erythrocytes and hemoglobin level, which indicates the development of anemia against the background of lymphopenia. In the study of the psychosomatic state of women before and after treatment, signs of increased fatigue and sleep disturbances were revealed. A significant increase in the level of cortisol in the blood serum before and after treatment was established, which can lead to weakness, sleep disorders and depression.

**Conclusion.** Thus, for a more complete and qualitative treatment of patients, it is necessary to take into account in the general therapy complex its influence on their psychosomatic state, which will



allow developing an adequate treatment tactic in order to improve the quality of life and improve the survival of cancer patients.

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## **DONOSOLOGICAL MARKERS OF ADAPTIVE MECHANISMS OF THE BODY IN ATHLETES**

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**Introduction.** The prospects for progress development of cyclic kind of sports in Ukraine demand the increase of sportsmen capacities level for the highest achievements, as a result of intensive, longtime, physical and psychoemotional loads during the preparative, basic and pre contest periods of workout session. It puts the priority task of health preservation in conditions of extremely high risk of disruption of adaptive possibilities of the organism. Goal. Organization of methodical approach to complex scientific research of changes in laboratory indicators. Theoretical justification of physiological readiness of athletes with an assessment of adaptation and recovery capabilities on the accompanying significant physiological loads. Monitoring the course and intensity of the process of recovery of wasted body stokes hormonal activity, the nature of the dynamics of a regular biochemical process, protein synthesis, accumulation of metabolic products, oxidative processes, restoration of energy substances and water-electrolyte balance of organism. Access the prognostic significance of precursor markers of pathology.

**Materials and methods.** The idea of the cyclic development of the level of adaptive capacity at high physical loads is aimed at achieving a record result. Continuation of the impact of the load accumulation of toxic metabolites can lead to depletion of body resources. To prevent the development of the pathological syndrome, as a consequence of fatigue, before the competition period, an analysis of the dynamics of functional biochemical blood indices is needed, reflecting the essence of the studied process. Indicators of energy potential, regulation of metabolism in muscle activity hormonal status, osmotic pressure, electrolytes and trace elements, ratio of the processes of aerobic and anaerobic glycolysis.

**Results.** As a result of deep and integrated, health and biological researches provided for athletes, we appreciated training effect - it is objective information about the changes of body functional systems, as well as other adaptation for changes. Investigation of changes in blood biochemical parameters to the adequacy of exercises, adaptation of the athletes body, recommendations for training correction and their personalization.