

## THE USE OF PHYSICAL FACTORS ON THE PRINCIPLE OF BIOFEEDBACK IN REHABILITATION-DIAGNOSTIC SYSTEM

Butskaya L.V., <sup>1</sup>Chuhrayeva O.N., <sup>1</sup>Chuhrayev N.V., Butskiy V.V.

National Technical University of Ukraine "KPI», [ukraina2006@narod.ru](mailto:ukraina2006@narod.ru),

<sup>1</sup>Research Institute of "Medical Technology Innovation», [nv11111@mail.ru](mailto:nv11111@mail.ru)

The use of physical factors on the principle of biofeedback interaction among people working in conditions of high mental and physical stress increases the effectiveness of monitoring and correction of their functional state. [1,2]. Special attention to the development of diagnostic systems worth using local representative areas of the human body that are on the hands, feet, iris, face and auricular shell. These zones can be used to track the immediate changes in the functional state of the person with the following preventive physiotherapeutic correction of feedback [2]. To correct the priority is low-intensity exposure, which can run and adjust processes sanogenesis at the level of the whole organism [1,2].

The aim of the study was the ability to manage the functional state of a person working under conditions of high mental and physical stress through physical therapy system for monitoring and rapid correction with the use of low-intensity physical therapy.

Baseline studies were conducted on groups of athletes and civilian pilots. To achieve the objectives have been identified, the three groups surveyed. The first group (n = 25), were highly skilled athletes, and the second (15) - the pilots, the control group (CG) were (25) - practically healthy persons. All subjects performed a standard test of autonomic Nechushkin (CBT), dimension (VC) and the definition of pain sensitivity (PSc) auricular biologically active points (ABAT), a detailed medical examination. Indicators of EP determined the device MIT-ET-11. Performed magnetolaser impact (MLT) MLT-MIT device.

Results and discussion. Analysis of the data shows that in pilots, as well as in cyclic sports athletes, high-risk systems are the cardiovascular and nervous, which correspond to high points of the electrical conductivity of the heart, brain, and liver, we observed in 90% of the patients, as well as lower high performance SVT-level functional systems of the heart, lung, colon and stomach, and higher rates of high-level WBS functional systems of the liver and kidneys. The average total value of the electrical conductivity ABAT was close in pilots and athletes, and amounted to  $10,58 \pm 1.76$  rel. units. in the control group EP ABAT was  $15,23 \pm 1,62$  rel. units. ( $P < 0.05$ ). The points which correspond somato topical bodies with chronic pathology in remission or had previously injured in 93% of EP 20 - 55 rel. units. warhead and increased in 99% of cases. In acute disease in 95% of the cases - the EP was higher than 50 rel. units. and the PSc was an increased of 98%. EP ABC against psychophysical stress increased from 10 to 20 RH. units. Athletes with low EP ABAT and the centre line of SVT  $20 \pm 2.25$  relative units, the results were better. After a rest or against MLT, ABAT EP decreased, mood, stamina and performance improved, but those figures SVT, which were to impact beyond the individual corridor standards, after MLT in 60% belonged to him. It was found that the average standard autonomic tests was significantly higher in the control group, which was dominated by people with low fitness are not involved in sports. Thus the decrease in electrical conductivity, is a sign of improvement of the body or in the course of natural recovery, or as the result correct.

Conclusions. Due to mobility, accessibility and efficiency, we proposed a system using biofeedback relationship, which includes monitoring and rapid, and the rapid correction of violations, provides additional capabilities for managing human health, working in extreme conditions. Reliable electrical dynamics of the BAT in response to low-intensity physical therapy action, indicates the possibility of control by the human body at high pressures studied by a combination of methods.

### References:

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