



testifies the exhaustion of adaptation resources and is the cause of tiredness development.

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**THE INFLUENCE OF FRUSTRATION ON THE EFFECTIVENESS OF
INTELLECTUAL WORK CAPACITY OF STUDENTS**

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Background. Psychophysiological problem of personality frustration is a topical problem in studying of adaptation process of students to informational workloads of education in university during its first years. The question of effectiveness of intellectual work capacity of a person in situation of frustration is not thoroughly known yet.

Objective: to determine the effectiveness of intellectual work capacity of medical students with different level of manifestation of personality frustration.

Materials and methods. The research was carried out on 123 medical students in age of 18-20 years (49 men and 74 women) – 35 persons had high frustration level, 52 of the examined had medium level of frustration process manifestation. Control group included 36 persons. In control group frustration was absent or its manifestation level was low. Adequacy of behavior in situations of frustration was determined using the Rosenzweig test of frustration reactions. The effectiveness of intellectual work capacity was carried out with help of Burdon proofreading test (literal variant).

Results. In the result of research it was determined that during the first minute the medium volume of proofreading test was accomplished on the same level in all 3 groups. Students with high frustration level made the bigger quantity of mistakes. The coefficients of accuracy, productivity and steadiness of attention in that group were reliably lower than in two others. The high effectiveness of Burdon test during the second minute is maximal in control group and medium in group with medium frustration level. The quantity of reviewed signs during the second minute of test increased in all 3 groups. On the third minute the volume and quality of accomplishment of intellectual workload in all 3 groups decreased. The highest level of tiredness was shown in the group of frustrated examined.

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INTRATUBERCULAR STRUCTURE OF PHRENIC NERVES

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Aim. We have studied the phrenic nerves and their pericardial branches as the main sources of innervation of the pericardium.

Results. Structural features of the phrenic nerve and pericardial branches were studied at two levels above and below its root zone. The trunk of the nerve and its branches as well as the quantity and size of the fascicles were measured and counted in transverse sections. The composition of medullated nerve fibers of various



diameters and their percentage ratio were defined. It was ascertained that the phrenic nerves and pericardial branches contain fibers of all calibers. In the upper part of the pericardium that is above the root zone fibers of medium and small calibers dominate in a quantitative sense. In the middle section at the level of the root zone medium and large calibers dominate. And at the lower part of it we could see more fibers of a larger caliber. Fields of enlightenment were detected in the pericardial branches, which are filled with non-medullated fibers according to modern concepts. Functional composition and appurtenance of individual pericardial nerves are not the same. Medullated nerve fibers connected with sensitive nerve endings of the pericardium. According to our research, in the lower left side of the pericardium more thick medullated(myelinated) nerve fibers were found to be connected with presented here encapsulated nerve endings of the Vater-Pacini corpuscles type and Krause's end bulbs (also known as bulboid corpuscles, corpuscular bulboidea). Nerve fibers of medium and small calibers prevailing in other parts of the pericardium form free nerve endings with different degrees of arborization.

Conclusion. Thus we can say that in the pericardium there can be identified not just the areas of occurrence of certain forms of receptors, but also areas of the nerve fibers. This extends our understanding of the topography of pericardium reflexogenous zones.

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PROGNOSTIC CRITERIA FOR THE EVALUATION OF THE IMPACT OF EMOTIONAL STRESS ON THE HUMAN BODY

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Background. There are different views on the importance of emotions for work. Each emotion is useful. It allows an individual to quickly assess their condition and to respond to any type of harmful, especially prognostically damaging action (P. Sudakov, 1984).

It is believed that the negative emotions are connected primarily with the excitation of the sympathetic-adrenal system, i.e., with sympathetic effect. However, changes in the strong negative emotions can manifest itself in the form of both sympathetic and parasympathetic effects (Yu. Moikin, 1987). So, in the study of cardiovascular activity parameters in the condition of emotional stress were determined sharp individual fluctuations of the rhythm of the heart rate from significant tachycardia (over 120 beats per minute) to a sharp bradycardia (44 beats per minute) (E. Aganjanz, 1979).

Results. At the present, the problem of psycho-emotional stress remains pressing. Above all, objective criteria for the assessment of the emotional stress level in humans are still not elaborated. The degree of regulatory systems tension can be evaluated by many techniques, for example, by studying the content of catecholamines, steroid hormones, etc.

Many of these methods are invasive, labour-intensive, require time-consuming,