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**МІЖВУЗІВСЬКОЇ КОНФЕРЕНЦІЇ**  
**МОЛОДИХ ВЧЕНИХ ТА СТУДЕНТІВ**  
**«МЕДИЦИНА ТРЕТЬОГО ТИСЯЧОЛІТТЯ»**  
*до 215-ої річниці утворення Харківської вищої медичної школи*



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Rybolovlev Yu.R. Experimental study of anti-inflammatory effect showed that monoinjection with meloxicam decreased the content of SA in 1,9 times. In the case of monoinjection with caffeine, there was a 1,7 decrease in the content of the SA against the formalin edema, which was not statistically significantly different from the reference drug. The combination of meloxicam and caffeine was the most effective among the others - it demonstrated a 2.2 decrease in the SA content and was closer to control; that is, there was a potentiation of anti-inflammatory effect of meloxicam by caffeine. The researched composition was better than the reference drug.

Conclusions: It has been established that the leader in biochemical studies is a two-component pharmaceutical composition of meloxicam with caffeine

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EXPRESS ASSESSMENT OF THE FUNCTIONAL STATE OF THE  
CARDIOVASCULAR SYSTEM OF MEDICAL STUDENTS THROUGH  
FUNCTIONAL TESTS

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One of the most important strategic tasks of the state is to preserve and strengthen the health of student youth. Annual medical examinations of students attending higher education, show a significant deterioration in their functional status, especially the cardiovascular system (CVS), physical development lag, and a high percentage of people with chronic illnesses. These tendencies are particularly evident in relation to students of medical universities. The activity of a medical student is among the types of work strained in the emotional plan, which affects their mental and physical health. Deviations in the state of health, formed in adolescence, reduce the possibility of implementing important social and biological functions when entering the socially active period of life. In this regard, it is relevant to assess the functional state of students, primarily the cardiovascular system as an indicator of the autonomic nervous system.



The aim of the study - To evaluate the functional state of the cardiovascular system of students of the first year with the help of functional tests of Ruffie and Martine-Kushelevsky.

Materials and methods of research. The research was conducted on the basis of Kharkiv National Medical University. All participants were students of the first year of study. To determine the Ruffie index, the participants measured the heart rate (HR) for 15 seconds before and after the load. The assessment of cardiac performance was calculated using the appropriate formula. The results were evaluated on a scale of 1 to 15. To determine the type of reaction of the CVS, heart rates and arterial pressure before and after loading were evaluated. After that, an analysis of the data was carried out.

Results of the research and their discussion. It should be noted that the Ruffie's index was used to evaluate the cardiac performance in physical work, Martin-Kushelevsky's test - evaluation of CVS recovery processes under stress. Analysis of the data allowed to divide students into three groups: 30.9% had normotonic type of reaction; 45.6% of participants had hypotonic type and 23.5% hypertonic type. In the first group, the Ruffie index was  $6.7 \pm 0.5$ , the second group was  $7.9 \pm 0.7$  and the last one was  $9.6 \pm 0.4$ .

That is, in the third of the first-year students who had a hypertensive type of reaction, the output of the integral index of CVS in the range of "stress" was noted, indicating an increased load on the blood supply apparatus with some decrease in the variability, most likely due to the consumption of a large part of the energy by the students to prepare for external independent assessment and stay all the time in stressful situations due to the high mental load at the university.

Conclusions. In our work, we showed that a third of the students noted the functional voltage of the cardiovascular system. The adaptive activity of the organism is carried out on the brink of opportunities, which may be accompanied by the development of certain violations. The state of the functional voltage of the adaptation mechanisms is the initial stage of the border zone between health and disease. You should not miss the time and have time to make a correction.