

Table 2

Results of testing young badminton players

Motor abilities	Control exercise	M ± m	r	r
Speed	Running 30 m	4,76 ± 0,11	-0,7	0,8
Coordination	Running 3·10 m	7,37 ± 0,08		
Speed-strength	Long jumping, sm	210,36 ± 5,87	-0,8	0,7
	High jumping, sm	43,73 ± 1,67		
Speed-actioned	Tapping test, number of times	29,73 ± 1,41	-0,4	0,5
Strength	Carpal dynamometry, right arm, kg	29,55 ± 1,63		
	Carpal dynamometry, left arm, kg	24,55 ± 1,73		

An average connection between the motor action index speed (tapping test) was determined with the result of running 30 m ( $r = 0,6$ ).

The obtained results are supported by specialists in the field of sports training that are created during adolescence some physiological prerequisites for the development of speed and power abilities. They underlie the growth speed. Adolescence is also associated with the onset of puberty, which is accompanied by increased excitability of the nervous system and its instability, which adversely affects the adaptation to physical stress and recovery process. Therefore, the strictly individual approach is required during the training.

According to the study, **the following conclusions** can be made:

1. Analysis of the indicators of the physical development of young athletes aged 14–16 showed that the level of physical development of children in the study group is relevant to the age groups and refers to the fourth and the fifth development zones. There is a harmonious physical development as well.

2. The determinate high correlation of motor abilities show their significance and possible use as a criterion in the selection of badminton players.

#### References

1. Glebovich B.V., Polevshchikov M.M. The selection of sports badminton. – Yoshkar-Ola, 1994. – 30p.
2. Kiselev A.N. Psychological testing in physical education and sport: education guidance / A.N. Kiselev; Pomor State University named after Lomonosov. – 2-nd publication – Arkhangelsk, 2008. – 128 p.
3. Lvova O.S., Chainikov S.A. Investigation of physical development and motor fitness younger students, DEALING badminton // International Journal of Experimental Education. – 2014. – № 7 – P. 67–69: URL: [www.rae.ru/meo/?section=content&op=show\\_article&article\\_id=5476](http://www.rae.ru/meo/?section=content&op=show_article&article_id=5476).
5. Volokitiina T.V., Nikitinskaya N.I. Physical development and physical education of children / Teaching guidelines. – Arkhangelsk, 1992.
6. Smirnov Y.N. Badminton: a textbook for institutes. – 2-nd publication. – M.: Soviet Sport, 2011. – 248 p.
7. Zhabankov O.V. Special physical training in badminton. Methodological rationale. – M.: BMSTU (Moscow State Technical University named after Bauman), 1997. – 32 p.

The work is submitted to the International Scientific Conference «Modern Problems of Experi-

mental and Clinical Medicine», Bangkok-Pattaya (Thailand), December, 20–30, 2014, came to the editorial office on 12.12.2014.

#### THE QUALITY OF LIFE IN PATIENTS WITH CHRONIC PANCREATITIS

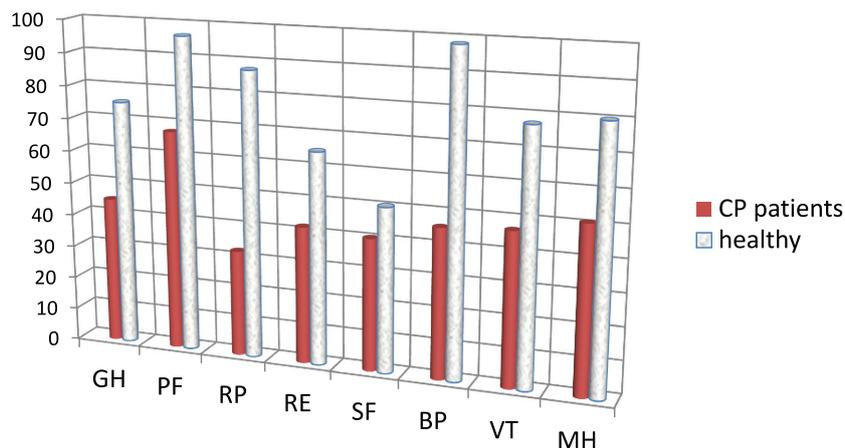
Mikhailova O.D., Vakhrushev Y.M., Grigus Y.I.

Izhevsk State Medical Academy, Izhevsk,  
e-mail: [yagr@udmlink.ru](mailto:yagr@udmlink.ru)

Chronic pancreatitis (CP) is a socially significant disease due to the high morbidity and frequent primary disability (15% patients). Thus, in the Udmurt Republic was revealed high growth of morbidity for diseases of the pancreas: the overall incidence increased from 460,5 persons per 100 thousand population in 2005 to 835,1 persons per 100 thousand people in 2013. Annual growth in the overall incidence ranged from 7,2 to 18,6%. Thus there is a constant progression of the disease with irreversible changes in pancreatic tissue. Constant keeping diet and long-term use of drugs limit the usual rhythm of life of patients. In recent years, assessment of life quality (LQ), which determines the degree of satisfaction of human needs, is widely used to characterize the severity of the pathological process, its dynamics and the effectiveness of therapeutic interventions. Definition of quality of life is particularly important in chronic diseases that require follow-up therapy for a long time.

The aim of our study was to investigate violations of the features of quality of life in patients with CP.

**Materials and methods of research.** We examined 112 patients with exacerbation of CP at the age of 33–65 years. There were 45 men and 67 women. The diagnosis was verified on the basis of carefully collected medical history, laboratory data and imaging studies (ultrasonography and fibrogastroduodenoscopy). LQ was assessed using the SF-36 test «Health status survey» (Ware J.I., 1994), where 100 points mean complete health, and the test «Gastrointestinal index of life quality» GIOLI. To study the peculiarities of patients nutrition we used special questionnaire. The results were compared with the control group (20 healthy subjects).



The data of health quality in CP patients and healthy (due to th SF-36 questionnaire)

**Results of research and their discussion.** Testing has shown that CP patients suffer predominantly physical component of health (Figure). Thus, there were significantly limited physical functioning (PF) –  $67,5 \pm 8,2$  points and role functioning (RP) –  $32,9 \pm 9,2$  points, that reflect the influence of physical condition to performing exercise and daily activities (in the control group –  $96,3 \pm 2,4$  and  $87,5 \pm 7,5$ , respectively). The general health status (GH) and pain intensity (BP) patients evaluated as  $44,9 \pm 7,4$  points and  $45,9 \pm 11,3$  points, in healthy, these figures were  $75,3 \pm 7,1$  and  $98,3 \pm 2,1$  points ( $p < 0,05$ ). In the psychological component of health social functioning (SF) and role functioning (RE) due to emotional state, tended to decrease. Vital activity (VT) was limited to  $47,0 \pm 10,4$  points, in healthy –  $77,5 \pm 4,2$  points ( $p < 0,05$ ). Mental health (MH) that characterize the presence of anxiety and depression was also significantly reduced compared with the control group:  $51,1 \pm 9,5$  points and  $80,0 \pm 2,1$ , respectively.

According to the questionnaire GIOLI and special questionnaire, with 82,1% of patients with CP due to the disease worsened relationship with family, 58,9% were forced to change their way of life, 64,3% of patients – food. 61,6% of patients experiencing discomfort from inadequate food intake, enjoyment of food received only 57,1% of patients. 45,5% of the examined persons noted sleep disturbance, 43,7% of patients marked poor coping with everyday stress. Due to stress majority of respondents (63,4%) had appetite elevation, in case of positive emotions (when they were satisfied by themselves) 41,9% patients allowed themselves to eat something, 27,7% of patients could drink alcohol.

#### Conclusion

In the period of CP exacerbation physical and psychological components of health suffer, that connected with chronic disease and necessity to

change diet. With help of the SF-36 questionnaire we can detect and quantify changes in LQ for the individual follow-up psychological treatment.

The work is submitted to the International Scientific Conference «The quality of life of patients with different pathologies», Mauritius, February, 17–24, 2015, came to the editorial office on 15.01.2015.

#### ATTACKS OF CARDIOVASCULAR BOTH NERVOUS ILLNESSES AND THEIR INTERRELATION WITH NANOFUCTUATIONS OF THE MAGNETIC FIELD OF THE EARTH

Sterlikova I.V.

*The Educational Independent Noncommercial Organization of Higher education «The Moscow's psihologo- social university», branch, Murom, e-mail: sterlikova52@mail.ru*

The magnetic field of the Earth can be divided conditionally on two parts: constant and variable as they have a various origin. Sources of a constant component of a magnetic field are located in a planet. Sources of a variable component of a magnetic field have an extraterrestrial origin. The variation field is imposed on constant, causing change in time as a whole all magnetic field of the Earth. The geometrical difference between observable size of a magnetic field and its average value for any long time interval (month, year) is called as a vector of magnetic variations of fields. The size of change of a variable component of a field in comparison with a constant component is insignificant. Magnetic variations share on fast and slow (century). Among fast variations distinguish quiet and revolted (geomagnetic pulsations). Geomagnetic pulsations by the physical nature are MGD – waves in magnetospheric plasma which are transformed in electromagnetic waves at the approach to the Earth.