

Table 2

The School Anxiety Level and the Lyceum Pupils' Cytogenetic Homeostasis Indices Correlation

	<i>N</i>	<i>R</i> (Spearman)	<i>t</i> ( <i>N</i> - 2)	<i>p</i>
The constrictions & the school anxiety	65	-0,258633	-2,12514	0,037503
The invaginations & the school anxiety	65	-0,067785	-0,53926	0,591606
The double nuclei & the school anxiety	65	0,051745	0,41127	0,682273
The micro-nuclei & the school anxiety	65	0,291288	2,41683	0,018564
The «tailing» nuclei & the school anxiety	65	-0,098354	-0,78447	0,435706
The nuclear disorders & the school anxiety	65	-0,029021	-0,23044	0,818496

Table 3

The FMA Profile and the Cytogenetic Homeostasis Indices Correlation

	<i>N</i>	<i>R</i> (Spearman)	<i>t</i> ( <i>N</i> - 2)	<i>p</i>
The constrictions & FMA	104	0,090375	0,916492	0,361571
The invaginations & FMA	104	0,025098	0,253561	0,800345
The double nuclei & FMA	104	-0,064601	-0,653803	0,514710
The micro-nuclei & FMA	104	-0,082854	-0,839674	0,403055
The «tailing» nuclei & FMA	104	-0,048351	-0,488895	0,625966
The nuclear disorders & FMA	104	-0,021028	-0,212424	0,832200

As the formation, that is the micro-nuclei in the cells are being associated with the chromosomal or even the genomic disorders (e.g. Schmid W., 1975; Novitzky V.V. and et al., 1995), then the similar connection revealing between the cytogenetic indices and the school anxiety level is being indicated upon the development and the measures application necessary, having directed at the lyceum pupils' way of the life and the activity optimization, in particular – having differed from the others by the school anxiety high level, cytogenetic homeostasis of which is, apparently, the most vulnerable one.

The work was submitted to International Scientific Conference «The Experimental and Clinical Medicine Contemporary Challenges», Thailand, 20–28 February, 2010, came to the editorial office on 25.12.2009.

**THE PECULIARITIES  
OF MEDICAMENTAL MANAGEMENT  
OF THE PATIENTS OF ELDERLY AGE  
WITH COMBINED  
CARDIORESPIRATORY PATHOLOGY**

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The chronic obstructive illness of lungs (COIL), as the rule, develops of the persons older than 45 years, is slowly progressing, heavy and extremely heavy duration of illness falls on the age of 55-56 years. For this age population there is characteristic the polymorbidity and usually COIL is not the only one disease of the elderly man. The most often in the older age groups COIL is taking at the background of coronary artery disease, heart

failure, the abnormalities of the rhythm, hypertonic disease, diabetes mellitus, thrombophlebitis etc.

Accordingly, except the therapy by the COIL, these patients receive coronary active agents, hypotensive, diuretic and antiarrhythmic preparations, heart glycosides. The considerable part of elderly people takes sedative and hypnotic preparations. Bronchodilators occupy the central place in the symptomatic therapy COIL, all categories of bronchodilators raise tolerance to the physical load, even while the absence of changes of the volume of forced exhalation in 1 second (VFE1). With the taking into consideration of this fact, that elderly patients have multiorgan pathology, tachycardia, hypoxemia, the lowering with the age sensitivity of receptors to sympathomimetics, while the curing of this group of patients there raises the role of anticholinergic preparations. Ipratropium bromide is prescribed as the monotherapy, and in comparison with  $\beta_2$  – agonists. More revealed and fast subjective improvement is reached while the use of unbulized solution Bedural (fixed combination of fenoterol and ipratropium bromide). While the combination of inhalation bronchodilation tools there occurs the improvement of bronchial patency in the more degree, then while the prescription of any of these preparations as monotherapy. The rather comfortable and less expensive are fixed combinations of preparations in one inhaler. The combination of bronchodilators with different mechanisms of action raise the effectiveness and lowers the risks of side effects in comparison with the raising of the doze of one preparation. One of these preparations is berodual. The frequency of side effects while the use of berodual is lower than while use of sympathomimetics, so it can be used while the accompanying cardiovascular diseases of the persons of elderly and senile age. It's considered that the optimal inhalation technique of delivery of preparation while the intensification of COIL is dozed, aerosol inhalers in the combination with spacers or nebulizers. For people of elderly age, with regard to disfunction of respiratory muscular system, mental abnormalities, gravity of the condition there is preferably to use nebulizers. In connection with that patients of older groups can't make adequate inhalation maneuver, it impedes the use by them of dozed aerosol inhalers. Besides, the use of nebulizers doesn't require the cooperation of patient and constant control from the side of medical personnel of observance of the rules of inhalation.

The aim of our research is to assess the effectiveness and safety of nebulizing therapy with berodual of the elderly people with COIL in combination with coronary disease of heart and artery

hypertension. We observed 37 sick people with COIL with the middle-heavy, heavy and extremely-heavy duration at the age from 59 till 75 years at the period of intensification. COIL of these patients was combined with stenocardia of loading FK P-H and Hypertonic disease of P and H stages. With taking into account that at the phase of intensification patients with COIL require intensive bronchodilator therapy with an adequate way of delivery of bronchodilators, patients was treated with the therapy of inhalation berodual through the nebulizer «Delphinus F1000» (Itali). The assessment of effectiveness of curing was carried out by the facts of clinically-functioned research, which included spirometry, peak flow, ECG, there was assessed the frequency of heart beat, frequency of respiratory movements, arterial pressure, quality of sleep, tolerance to the physical load, satiety of blood with oxygen ( $\text{SaO}_2$ ) before and after inhalation course. The course of curing continued in average 18 days, with 2-3 inhalations a day through 6-8 hours. At the background of curing all patients have decreased the evidence of short breath, the number of dry wheezes in lungs, there was observed the trustworthiness increase of showings of bronchial patency (speed of space of exhalation increases in average to 32%, VGE1 – to 9%), there increased the tolerance to the physical load, there normalized the sleep,  $\text{SaO}_2$  increases in average to 3-5%. Meanwhile there was noticed good portability of berodual, there were no considerable changes of ECG and abnormalities of heart rhythm revealed. Patients at the background of decrease of anoxemia have the decreased figures of frequency of heart beat and frequency of breath moving without rising of arterial pressure.

Thereby, the curing with inhalation berodual with the help of nebulizer is the high effective, safe method and guarantees the stabilization of condition of the sick people with COIL, without appearance of cardiotoxic effect. With the taking into consideration that patients of elderly ages COIL is often combined with coronary disease of heart and hypertonic disease, weakening of respiratory muscular system and mental abnormalities, nebulizer therapy of combined bronchodilators (including berodual) is the most adequate and effective way of bronchodilation therapy in conditions of hospital.

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The work was submitted to the International Scientific Conference «Modern science intensive technologies», Spain (Tenerife island), 20-27 of November 2010, came to the editorial office 05.10.2010.