important. The knowledge of the immune system alteration dynamic legislations increases the effectiveness of the workers' health condition evaluation and prognosis.

The work was submitted to International Scientific Conference «Fundamental and applied research in medicine», France (Paris), 15–22 October 2010, came to the editorial office on 31.08.2010.

## THE TEENAGERS' CYTOGENETIC HOMEOSTASIS PECULIARITIES AND SPECIAL FEATURES UNDER THE ECOLOGICAL ENVIRONMENT PRESENT – DAY CONDITIONS

Boldin V.E., Khrenkova V.V., Abakumova L.V., Soboleva E.V. The Southern Federal University, Rostov-on-Don, Russia, e-mail: centrepav@mail.ru

It is quite known, that the genetic homeostasis disorders symptoms, such as the micronuclei and the other nuclear anomalies, having revealed by the micro-nuclear test, are the non-specific human organism reaction upon the various and the diverse (e.g. toxic, ecological and stress) influences. The cytogenetic homeostasis evaluation has been carried out at the 118 lyceum pupils at the age of the 13–15 years, having learned at the «Classical» №1 lyceum MOU in the Rostov-on-Don town.

The buccal epithelium cells research by means of the micro-nuclear test (e.g. Zhuleva and et. al., 1996) has been discovered some quantity nuclei with the nuclear disorders presence at all the examined and the tested ones: by the micro-nuclei, by the invaginations, by the «tails», by the double nuclei, by the constrictions. Thus, the lyceum pupils' cytogenetic homeostasis research results have already been presented in the Table 1.

The nuclear disorders relative quantity has been varied from 1% up to 27%, having made up in average 6,907  $\pm$  0,404. The invaginations and the constrictions quantity from them has been varied in the ranges from 0 up to 8%, having made up in average 1,746  $\pm$  0,152 and 0,983  $\pm$  0,123 correspondingly, the double nuclei quantity – from 0 up to 6% (e.g. 1,364  $\pm$  0,127), the micronuclei – from 0 up to 9% (e.g. 0,881  $\pm$  0,133) and the «tailing» nuclei – from 0 up to 13% (e.g. 1,932  $\pm$  0,180).

Table 1
The Nuclear Disorders Relative Quantity in the Lyceum Pupils' Buccal Epithelium Cells (%)

	N	$M \pm m$	Minimum	Maximum
The nuclear disorders	118	$6,907 \pm 0,404$	1	27
The constrictions	118	$0,983 \pm 0,123$	0	8
The invaginations	118	$1,746 \pm 0,152$	0	8
The double nuclei	118	$1,364 \pm 0,127$	0	6
The micro-nuclei	118	$0,881 \pm 0,133$	0	9
The «tailing» nuclei	118	$1,932 \pm 0,180$	0	13

The «tailing» nuclei (e.g. 28%) have been prevailed at the examined and the tested lyceum pupils', the invaginations (e.g. 25%), the double nuclei have been made up 20%, the constrictions – 14%, the micro-nuclei – 13%.

Thus, it is quite evidently, that the nuclear disorders maximum quantity have been made up the invaginations and the «tailing» nuclei.

So, the correlation analysis has been carried out by us for the purpose of the possible connections revealing among the lyceum pupils' psycho-physiological characteristics and the

cytogenetic homeostasis level by means of the Spearman correlation rank coefficient. The final and the obtained results have been presented in the Tables 2 and 3.

As it can be seen from the Tables, the correlation analysis has already been revealed the reliable moderate positive connection presence between the school anxiety level and the buccal epithelial cells relative number with the micronuclei. So, the connections between the FMA profile characteristics and the cytogenetic homeostasis indices have not already been discovered.

Table 2
The School Anxiety Level and the Lyceum Pupils' Cytogenetic Homeostasis Indices Correlation

	N	R (Spearman)	t(N-2)	p
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

	N	R (Spearman)	t(N-2)	p
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; Novitczky 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

Ganceva H.H., Nazifullin V.L., Iliasova T.M., Gabitova D.M. Bashkir state medical university, Ufa, Russia, e-mail: dilbar.gabitova@mail.ru

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