increased by 3, 9 times, and for the period 120-150 days by 6, 6 times. The jump has taken place within 5 months, when the relative gain of length oviduct has made 147, 4 %.

The growth of weight of a body of the hens is active on 1 and 2 months of development, and oviduct on 4 and 5. These parameters are reduced, accordingly on 6, 7 and 6 month.

Thus, having compared the received results on weight of a body, weight and length of oviduct, it is possible to make the conclusion that the increase of alive weight of the hens occurs per the first 5 months and further is stabilized. In development oviduct, opposite, the first 4 months are the period of relative rest. And since 4 months there is an intensive development of an organ. The period 120-150 days, when weight of oviduct is increased by104 times, and length by 6, 6 times is necessary to consider critical.

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HOW MUCH HEALTHY IS "APPARENTLY HEALTHY" MEGACITY RESIDENT (IN TERMS OF KRASNOYARSK)

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Nowadays, more than a third of the world's population lives in big cities. Socially meaningful and professionally conditioned stressogenic diseases manifest themselves more acutely in a megalopolis. At the functional body reserves decreasing the priority value is acquired by dyscrasia diagnostics for a complex and effective sanitation of the internal environment. A non-specific resistance cellular link functional-metabolic reserve evaluated by means of chemiluminiscent (CL) method on *Tono-Oka et al.* (1983) in the modification of Zemskov V.M. with co-authors (1988) can serve one of the body's adaptative potential criteria. On the basis of the analysis of hemophages' "breathing outburst" kinetics parameters in 1252 persons of various sexes, ages and health states the reserve coefficients RC_S, RC_I and the prooxidant shift evaluation index were calculated. The norm is characterized by the values $RC_S \geq 3, 8$; $RC_I \geq 10$; EI=0%; a disease - $RC_S \leq 1, 5$; $RC_I \leq 2$; EI>33%, a pre-existing disease - $1, 5 < RC_S < 3, 8$; $2 < RC_I < 10$; $0\% < EI < 33\%$. The parameters association of "apparently healthy" and absolutely healthy people testified that in 80% of clinically asymptomatic active working age adults of both sexes the non-specific cellular defence functions in conditions of chronic oxidative stress. It is fraught with adaptative mechanisms deterioration. Authentically, in 6% of the selection a phagicytic cells' "functional palsy" has been found out. In children in conditions of constant urbanized environment chemical pollution an extreme adaptative mechanism with a higher prooxidant shift against the imbalance of mineral status and antioxidant components than in adults is realized. In 38% of pregnant women a double rise of cellular immune reactivity reserve capacity "is paid" by three-time intensification of the prooxidant shift and eight-time increase of the endogenous free-radical background. The reserve coefficient RC_S increase adaptative price is the prooxidant shift increase manifested in men 1, 7 times more intensive than in women. The phagocytic functional response is characterized by a reversed quotient (overshoot) of activated and basal production of free radicals and the reserve coefficient RC_I decrease 30 times at inflammatory, 3 times – at noninflammatory diseases and twice – at the pre-existing disease stage. The nonspecific resistance functional disturbances at the pre-existing disease stage are reversible when using the alimentary correction. The therapeutic measures efficiency enhances at their application with due consideration of the cellular immune reactivity original type and reserve corresponding to the body's phase of adaptation to the effects of controlled and uncontrolled factors of the environment.

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CARBOHYDRATE AND LIPID METABOLISM FACTORS IN GIRLS WITH MENSTRUAL FUNCTION DISORDER DEPENDING ON BODY WEIGHT

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The performances of the last years testify to high frequency of carbohydrate and lipid metabolism deviations from the age norms in girls with menstrual function disorders (MFD). However, these researches were mainly carried out in patients with polycystic ovarian syndrome, anorexia nervosa and Turner's syndrome. At the same time, the most commonly encountered MFD forms among teenagers are oligomenorrhea (OM) and pubertal uterine bleedings (PUB).

The purpose of the present work has become the study of carbohydrate and lipid metabolism features in teenage girls with OM and PUB depending on body-weight index (BWI). For the objective implementation 68 teenage girls were examined, 25 of them having OM and 43 – PUB. In 40 patients the BWI was contained within the confines of age norms (in 13 with

OM and in 27 with PUB). 28 patients had an increased BWI (12 with OM and 16 with PUB). The glucose loading was carried out according to the standard practice, the lipid metabolism state was valuated on the content of high-density lipoprotein cholesterol (HDLPC) and triglycerides (TG) in blood. The age deviations frequency of the studied factors was found out. For the evaluation of authenticity of the results the method of Fisher's angular transformation (Pφ) was used.

It has been established that the lipid content ratio, the character of which is evaluated as atherogenic one (the HDLPC level decrease and the TG level increase), in patients with normal BWI was registered in 17, 5 % (equally frequent at OM and PUB). At the overweight the specified disorders were revealed 2, 5 times as often (42, 9 %; Pφ<0, 001). The Analysis of glucose tolerance test results has revealed a flat character of the "sugar curve" in 40% of the examinees irrespective of the BWI, that is indicative of carbohydrate metabolism disorders in a significant part of the teenagers with MFD.

The carried out research results testify to a high frequency of lipid and carbohydrate metabolism disorders in girls with MFD not only with an increased, but also with normal BWI, that can be considered as a risk of the metabolic syndrome early formation and it should be born in mind when carrying out a complex of medical and preventive treatment measures.

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USE OF ULTRASONIC DOPPLEROGRAPHY IN GLAUCOMA PATIENTS

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Topicality

Glaucomatous optic neuropathy (GON) is the core of primary glaucoma. Alongside with ophthalmohypertension and specific changes of visual fields the GON enters into the triad of this disease cardinal symptoms (Yegorov Ye.A., 2002, Alyabyeva Zh.Yu., 2004). The GON pathogenesis includes some factors, one of which is a vascular one - optic nerve head microcirculation disorders (tendency to vasospasms, rheological disorders, venous stasis, perfusion pressure decrease) (Grigoryeva Ye.G., 2002, Galassi F., 2003). However, in spite of native and foreign researchers' works on the ocular blood flow study, the possibilities of modern eye circulatory dynamics and orbital region research methods have not been studied to the end by the present time.

The purpose is to study the circulatory dynamics in primary open-angle glaucoma (POAG) patients in the ophthalmic artery and central retinal artery by the ultrasonic duplex scanning method with color doppler mapping.

Materials and methods

Patients with obstructive affections in internal and external carotid arteries' regions were excluded from the examination.

We examined 38 patients (38 eyes) with the diagnosis of I-IV stage POAG (the main group). Among them, the I stage was registered in 9 patients, II stage – in 11, III – in 11 and IV – in 7 patients. In all the patients the intraocular tension (IOT) was normalized medicamentally or surgically and averaged 19, 4±2, 6 mm hg.

The control group was made up of 20 patients (20 eyes) with mature age-dependent cataract without glaucoma signs. The average age of both groups patients made 68, 3 ± 2, 4 years old.

The circulatory dynamics investigation was carried out on the multipurpose ultrasonic high definition imaging system (HDI – High Definition Imaging System) HDI 1500 of the ALT firm, USA, with a broad-band linear transducer of 5-12 mHz. The valuation of hemodynamic parameters was performed in the following vessels: ophthalmic artery and central retinal artery.

The ophthalmic artery was located with the help of the 5MHz frequency transducer, at the depth of 38-42 mm at the vessel's entry into the orbital cavity, transbulbarily through the patient's closed eyelids. The patient's gaze direction was inward and downward. The pathfinder position is upper-external quadrant of the eye-bulb. The location direction – is to the orbital height, 15-30 ° from the median line.

The central retinal artery was defined at scanning plane passing through the optic disk. The blood flow investigation in this artery was performed within the region of 0-10 mm from the place of its entering into the optic nerve trunk thickness up to the eye-bulb, with the following valuation of all parameters.

At the investigation findings analysis the following Doppler frequency shift spectrum parameters were evaluated:

- maximum systolic velocity (V syst., cm/sec);
- end diastolic velocity (V diast., cm/sec);
- average blood velocity (V m., cm/sec);
- resistance index (RI).

Results

It is found out that the maximum systolic velocity is the least variable parameter in the POAG patients. There are no statistically-valid V syst. values differences with those in the control group registered (p<0, 05).

The average blood velocity in the ophthalmic artery in the main group patients decreased against the