

control group with the disease progression; the deviation from the control being authentic ($p < 0, 01$) at the I stage POAG. Thereafter (II-IV stages) a gradual average blood velocity decrease was registered. It testifies to the importance of this factor in the progression of the process.

At the analysis of the end-diastolic blood velocity changes as the vascular resistance factor, the data were got that a slight V diast. decrease, authentically differing from the norm at the III and IV stages only ($p < 0, 05$), takes place at the II-IV stages of the disease. The peripheral resistance index is in the inverse linear dependence on the end-diastolic velocity value (the lower the velocity – the higher the index value, and vice versa), that is why the RI dynamics in the ophthalmic artery according to the glaucoma stages was inversely as the described above changes of the end-diastolic velocity. The changes found out in the CRA look like this: At the initial stages of glaucoma the V syst. in the CRA decreased 1, 4 times compared to the control group. The Vm. at the OAG initial stage was 1, 5 times as lower. The CRA diastolic blood velocity was decreased beginning with the I stage ($p < 0, 05$) and also decreased with the glaucoma progression. The maximal CRA diastolic velocity fall was registered at the IV stage of glaucoma; the diastolic component being missing in one case. It was found out that the peripheral resistance indexes in OAG patients, beginning with the I stage of the disease, is authentically higher than in the group of control.

Conclusion

Ultrasonic methods of diagnostics using Doppler methods allow evaluating quantitative blood flow indexes in the ophthalmic artery and its branches at various stages of open-angle glaucoma, that affords an opportunity to come around to the diagnostics, treatment and prognostication of its course in a more detailed way.

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ACTIVITY OF SYMPHATO-ADRENAL SYSTEM AT DIFFERENT STAGES OF ONTOGENESIS

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The adaptive process, set as the program of actions by the regulator centres, is accompanied by mobilization of the visceral systems providing the physiological price and result. Research of catecholamines by separate parts discloses local mechanisms of regulation. At the same time functional activity of an organism is achieved owing to integrative processes.

From this point of view studying the general metabolism - adrenaline and noradrenaline is justified.

The symphato-adrenal system excreting catecholamines - noradrenaline and adrenaline - is of great importance for the adaptation of a growing organism to conditions of environment. It carries out its regulator influence on functions of an organism through hormonal mediators which, according to L.A. Orbeli, promote a constancy of the internal environment and its adaptation to varied conditions of life.

At present the significant amount of works has been published which discover the dynamics of excretion of catecholamines and their predecessors in children basically of teenage age, including those with academic and physical loadings.

According to our data, excretion of adrenaline and noradrenaline in urine in children in the age of 6-8 years undergoes the wavy dynamics in both sexual groups, with the greatest expressiveness in boys in the age of 6 and 7 years. Judging from excretion of adrenaline and noradrenaline in urine, the character of synthesis and utilization of catecholamines varies essentially. In this age interval, the chronotropic function of heart is appreciably reconstructed. Physiological preconditions of this age form the adequate mechanisms of urgent adaptation influencing behavioral activity.

Our researches have shown that boys adapt more difficultly for conditions of school: within one academic year the exhaustion dependent on a sex and age of the child develops in children. During educational occupations children in the age of 6-8 years show the changes reflecting a functional condition of an organism. The character and intensity of these changes serve a mark of "physiological cost" of academic load.

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MORPHO-TOPOGRAPHICAL FEATURES OF LARGE-SIZED OVARIAN CYSTADENOMAS

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Oothecomas occupy one of leading places among all the neoformations occurring in women. Except for mammary tumors the ovarian newgrowths among all the oncological diseases of woman genital sphere are second only to endometrial and endocervical carcinomas on frequency. About 80% of ovarian tumors are of nonmalignant nature and occur mainly in women aged 20-45 years old (Paltsev M.A., Anichkov N.M., 2001), 90% of all the neoformations make