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Treatment of Glaucoma with Normal Intraocular Pressure

- 1. Karimov Abdulaziz Abdukhalimovich
- 2. Akhmedov Tulkinjon Bakhtiyorjonovich

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^{1,2} Ophthalmological clinic «VISUS» Uzbekistan, Andijan **Abstract**: In the course of the study, open-angle glaucoma with normal IOP was found in 28 women and 19 men, aged 40 to 65 years. All glaucoma patients with normal IOP were prescribed prostaglandin «Betaxolol», which is the drug of the first choice. Betaxolol improves the blood supply to the optic nerve along with a hypotensive effect, has a vasodilating effect on small retrobulbar vessels, reducing their resistance index regardless of the degree of reduction in IOP. Conservative therapy was considered successful when the visual field had no negative dynamics after three months of treatment.

Keywords: glaucoma, normal intraocular pressure, clinical course.

Relevance

According to WHO, open-angle glaucoma ranks second among the causes of blindness and visual impairment in patients over 40 years of age. Historically, glaucoma has been described as a disease, one of the main signs of which is increased intraocular pressure (IOP), but recently cases of glaucoma with normal IOP have begun to be described. The growing interest in the disease is associated with its significant frequency, which, according to various authors, ranges from 5% to 30% of all primary glaucoma; progressive nature; possible disability of patients. In this regard, the issues of early detection of glaucoma patients with normal IOP are an urgent and complex medical and social task.

The aim of the study was to study the clinical course and analysis of the treatment of patients with glaucoma with normal IOP.

Material and methods

The study was conducted in the Ophthalmological Clinic «VISUS» in Andijan.

During ophthalmological examination, visometry, autorefractometry, biomicroscopy, ophthalmoscopy, gonioscopy, perimetry and tonometry were performed.

Research results

During the examination, glaucoma with normal IOP was diagnosed in 28 women and 19 men, aged 40 to 65 years.

Open-angle glaucoma with normal IOP was first detected in 16 people. In patients with newly diagnosed glaucoma, the initial stage of the process was noted in 12, developed in 4 examined patients.

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9 examined patients with newly diagnosed glaucoma had concomitant diseases in the form of hypertensive retinopathy, 3 patients had diabetic retinopathy.

The level of IOP was a very important, but not a determining factor in the diagnosis of glaucoma with normal IOP. The main diagnosis was the defects of the visual field, which were localized more often closer to the center and were more pronounced.

Also, dashed hemorrhages along the edge of the disc were noted in 2 patients. All patients complained of headaches. The main concomitant disease in glaucoma patients with normal IOP was untreated systemic hypertension; peripheral vasospasm was diagnosed in 9 patients, migraine in 12 women. In all glaucoma patients with normal pressure, intraocular pressure was within the average norm (<= 26 mmHg according to Maklakov).

All glaucoma patients with normal IOP were prescribed prostaglandin «Betaxolol», which is the drug of the first choice. Betaxolol improves the blood supply to the optic nerve along with a hypertensive effect, has a vasodilating effect on small retro bulbar vessels, reducing their resistance index regardless of the degree of reduction in IOP.

Systemic blockers of calcium tubules «nifedipine» were prescribed to relatively young patients, as well as in the initial stage of the disease. All patients were prescribed a vitamin complex preparation with immunostimulating and antioxidant properties «AEVIT» 1 tablet per month. After outpatient treatment, patients underwent visiometry, tonometry, and perimetry.

After the treatment, there was an improvement in visual acuity by 0.1-0.2 in 60% of patients. The total field of vision increased by 35 degrees in 70% of the studied patients. Indicators of ophthalmotonus were stable throughout the observation period.

Conservative therapy was considered successful when the visual field had no negative dynamics after three months of treatment.

One of the reasons for the late diagnosis of the disease was the traditional orientation of practical ophthalmologists to increased IOP as the first clinical sign of glaucoma. At the same time, low-pressure glaucoma (LND) is often established in a far-advanced stage, when, unfortunately, it is not possible for the patient to regain lost vision. With concomitant hypertension, the therapist prescribed treatment with antihypertensive drugs. Studies have shown the need for an individual approach in the treatment of each glaucoma patient, taking into account the risk factors available to him. With concomitant hypertension, correction of lipidemia and improvement of rheological properties of blood was important, and for vasospasmic patients, careful control of blood pressure, exclusion of vasospasm provocations was important.

Early diagnosis of normal pressure glaucoma is very difficult. Each such patient needs a detailed examination and long-term observation. If possible, diseases unrelated to glaucoma should be excluded. If the ophthalmotonus is in the zone of high or medium norm, it is advisable to bring it to low normal values using medication, laser treatment or even surgery. It is necessary to exclude the wrong position of the body and head during work and sleep. It is necessary to consult a therapist and a neurologist to identify and treat common vascular diseases and prescribe a course of treatment to improve blood circulation and metabolic processes in the eye and the optic nerve head

Conclusion

Thus, for the treatment of glaucoma with normal intraocular pressure, further development of pathogenetically based treatment of the disease and criteria for its effectiveness is required.

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