World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-21, April 2023
ISSN: 2749-3644

INFLUENCE OF ANTIHYPOTENSIVE DRUGS WITH A MODIFIED COMPOSITION IN THE TREATMENT OF GLAUCOMA ON THE COURSE OF DRY EYE SYNDROME

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Article history:

Received: February 1st 2023
Accepted: March 1st 2023
Published: April 4th 2023

Abstract:

Recently, the problem of the development of dry eye syndrome (DES) in patients with glaucoma has become particularly relevant. The main symptoms of DES are burning, redness, eye irritation, increased visual fatigue, and fluctuations in visual acuity during the day. In patients with glaucoma, the severity of symptoms correlates with the amount of antihypertensive drugs used, as well as the presence of a preservative in them.

Keywords: Dry eye, open-angle glaucoma;

RELEVANCE. Currently, in ophthalmic practice, most of the antihypertensive drugs used contain a preservative in various concentrations. This affects the quality of life of patients with glaucoma, their adherence to treatment and, consequently, the effectiveness of therapy [1]. Despite the fact that the treatment of glaucoma is recommended to start with the appointment of a single drug, glaucoma is often diagnosed at an advanced and far advanced stage, in which monotherapy cannot provide the necessary level of reduction in IOP. In most of these cases, it is possible to achieve IOP compensation with the help of several drugs of different groups. However, this decision is associated with an increase in the chronic exposure of the preservative to the ocular surface [1,2].

Recently, the problem of the development of dry eye syndrome (DES) in patients with glaucoma has become particularly relevant. The main symptoms of DES are burning, redness, eye irritation, increased visual fatigue, and fluctuations in visual acuity during the day. In patients with glaucoma, the severity of symptoms correlates with the amount of antihypertensive drugs used, as well as the presence of a preservative in them. Early diagnosis of DES in patients with glaucoma is an important part of a personalized approach to treatment and allows you to determine the need for non-preservative therapy. Currently, there are a large number of studies on the comparative efficacy and tolerability of the same antihypertensive drugs in the form of drugs with and without preservatives [2,3].

To date, they have been partially combined in a number of systematic reviews and in two meta-analyses [3]. Prostaglandin analogues have been used among non-preservative drugs for a relatively long time. However, if the initial monotherapy is ineffective, an increase in the antihypertensive regimen is required, which is possible only by adding new drugs with a preservative. Recently, new preservative-free forms of both dorzolamide, FC dorzolamide and timolol, as well as brimonidine, have appeared on the market.

PURPOSE OF THE STUDY. Evaluation of the effectiveness of combined non-preservative antihypertensive drugs with a modified composition in glaucoma.

OBJECTIVES: To evaluate the clinical and functional efficacy of the combined antihypertensive agent with a modified composition "Dorzolan extra" in primary open-angle glaucoma;

MATERIAL AND RESEARCH METHODS. The work was carried out on the basis of the TMA Multidisciplinary Clinic. It included the collection of clinical material in the ophthalmologist's office of the advisory polyclinic and the department of eye diseases. The study included 50 patients (86 eyes) with primary open-angle glaucoma. The distribution by sex and stages of POAG stages is presented in the graphs below. All patients were on medical treatment. The mean age of the patients was 61.1±5.6 years. From the total sample, 25 patients were selected who had indications for the replacement of antihypertensive drugs in the form of the following.

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The main group of 25 patients was given Dorzalan Extra 1 drop 2 times a day. A comparison group of 25 patients was given Dorzopt Plus 1 drop 2 times a day.

All patients underwent general ophthalmic examination methods, as well as Norn and Schirmer tests.

Results and discussion. Evaluation of the tear production indicator in dynamics using the Schirmer test showed that in the main group, after the drug was changed, an increase in tear production was determined in comparison with the Dorzopt plus group.

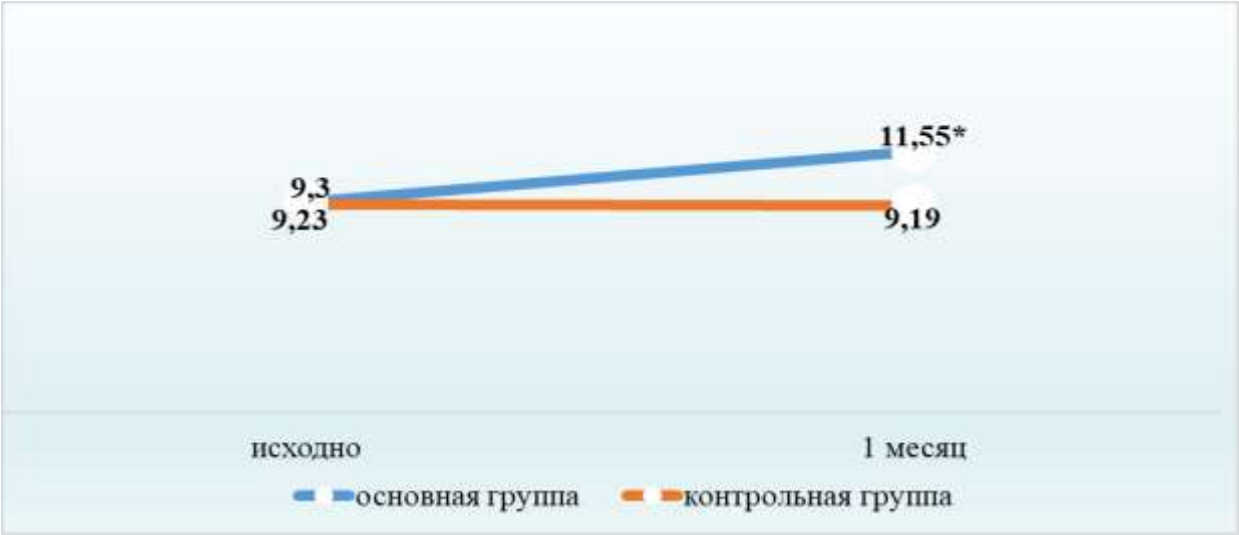
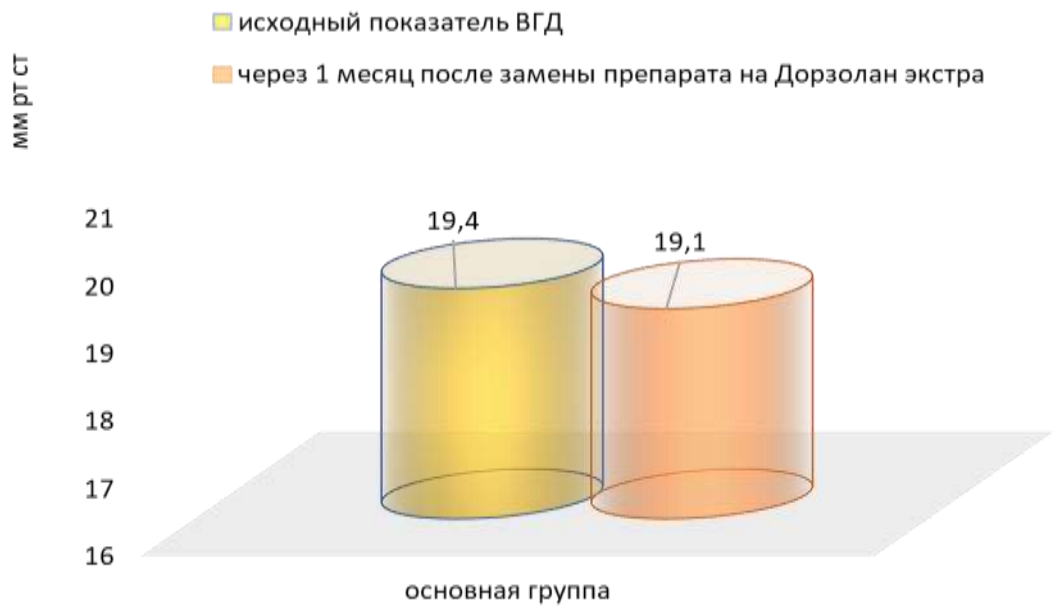


Рис. 3.6. Динамика результатов теста Ширмера (мм) в исследуемых группах в динамике. * - *различия в сравнении с исходными показателями статистически достоверные*



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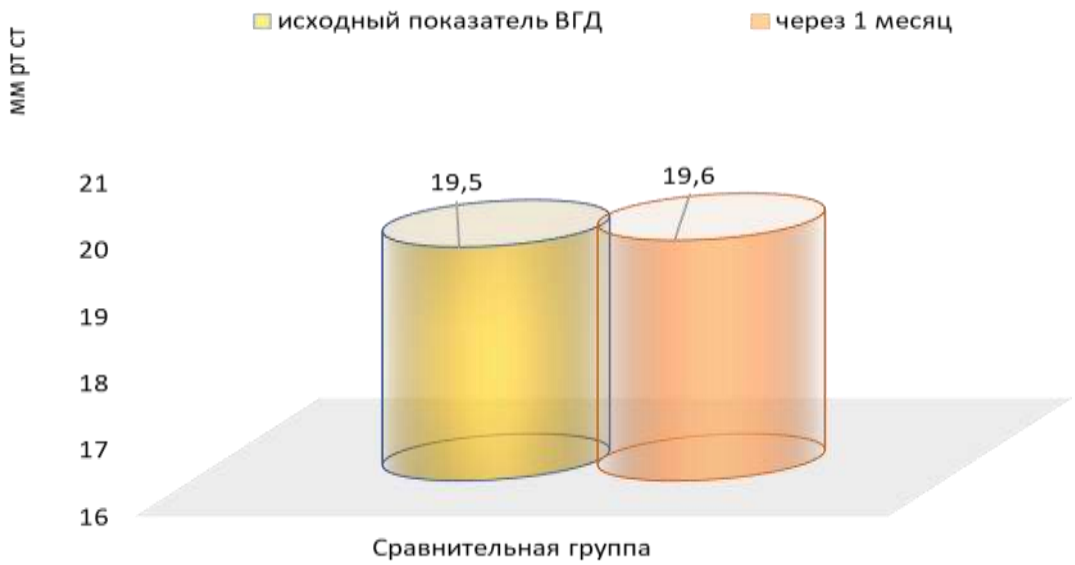
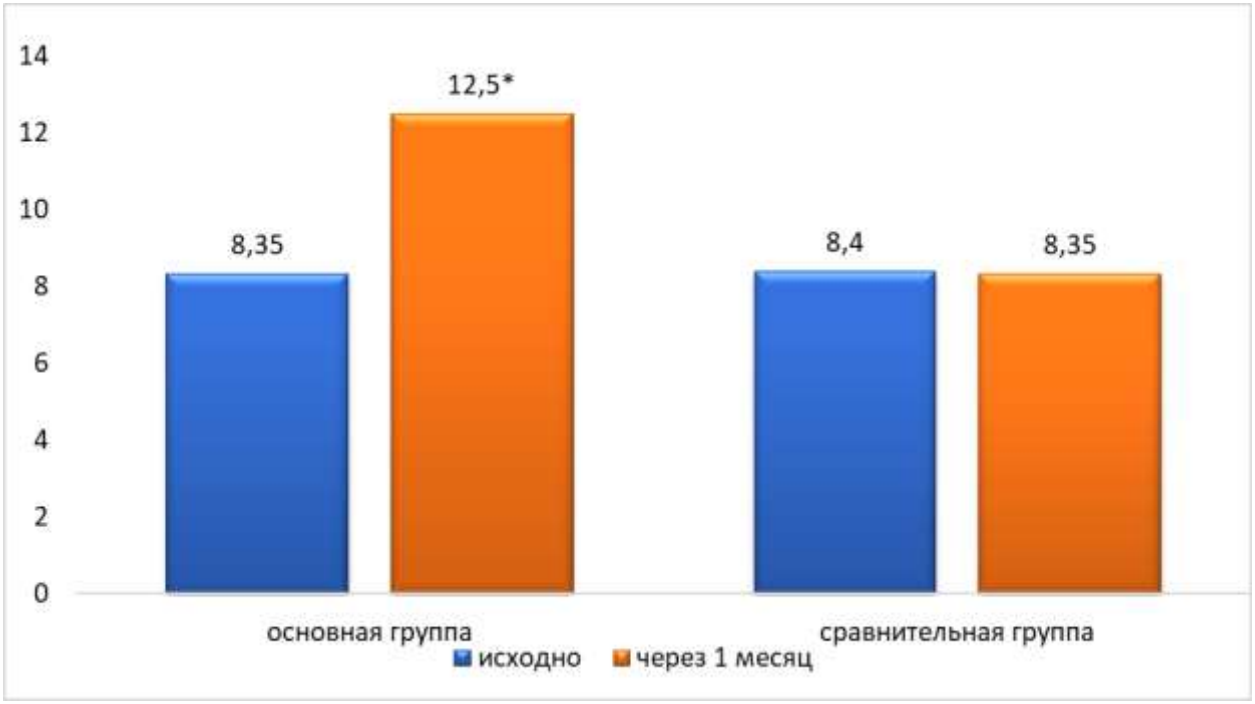


Rice. 3.4. Dynamics of the average IOP in the studied groups.
No statistically significant differences were found

IOP monitoring showed that the replacement of the antihypertensive drug did not lead to a decrease in the hypotensive effect and the average values were commensurate with those of the comparative group.



Rice. 3.6. The dynamics of the results of the Norn test (sec) in the studied groups in dynamics. * - differences compared to baseline are statistically significant.

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Evaluation of the tear film rupture time in dynamics using the Norn test showed that in the main group, after changing the drug, an increase in VRSP was determined in comparison with the group using Dorzopt plus.
Conclusion and conclusions. It has been established that the combination drug with a modified composition Dorzolan extra provides a hypotensive effect commensurate with its analogue in the treatment of POAG.
It has been proven that when using the combined antihypertensive drug with a modified composition of Dorzolan extra, a significantly lower severity of subjective manifestations of DES and a higher comfort of instillation are determined in comparison with Dorzopt plus.

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