IMPROVING METHODS OF TREATMENT OF OPTIC NERVE ATROPHY IN CHILDREN

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ABSTRACT

The effectiveness of laser stimulation in combination with neuroprotectors in the treatment of optic nerve atrophy was determined at the Department of Eye Diseases of the Bukhara State Medical Institute and the children's department of the Bukhara branch of RICMIATM. 20 children aged 8-16 years were subjected to standard examination and treatment. The results before and after treatment were analyzed and the effectiveness of the treatment was evaluated.

***Keywords**: Retinalamin, laser stimulation, optic nerve atrophy.*

АННАТОЦИЯ

Эффективность лазерной стимуляции в сочетании с нейропротекторами при лечении атрофии зрительного нерва определяли на кафедре глазных болезней Бухарского государственного медицинского института и детском отделении Бухарского филиала РИКМИАТМ. Стандартному обследованию и лечению были подвергнуты 20 детей в возрасте 8-16 лет. Были проанализированы результаты до и после лечения и оценена эффективность лечения.

***Ключевые слова**: Ретиналамин, лазерная стимуляция, атрофия зрительного нерва.*

АННАТОЦИЯ

Бухоро Давлат тиббиёт институтининг кўз касалликлари кафедраси ва РИКМИАТМ Бухоро филиали болалар бўлимида кўрув нерви халкаси атрофияларини даволашда нейропротекторлар билан биргаликда лазерстимуляция самарадорлиги аниқланди. 8-16 ёшгача бўлган 20 та бола стандарт текширувдан ўтказилди ва даво муолажалари бажарилди. Даводан олдинги ва даводан кейинги натижалар тахлил қилиниб, даво самарадорлиги бахоланди.

***Калит сўзлар**: Ретиналамин, лазерстимуляция, кўрув нерви халкаси атрофияси.*

INTRODUCTION

Atrophy of the optic nerve is an eye disease characterized by the weakening of vision due to the development of pathological processes affecting the nerve part of the organ. In other words, in atrophy, the fibers of the optic nerve slowly die, and information is transmitted from the retina to the brain in a distorted form. This pathology can occur for many reasons, most of which are related to the presence of ophthalmological diseases. The optic nerve is a special "route" through which the impulses generated during the perception of images pass. If any part is blocked, that is, if atrophy occurs, then the image is transmitted incorrectly. Unfortunately, this pathology can occur in people of any age. Modern diagnostic methods make it possible to study the disease in detail, and ophthalmologists have come to the conclusion that it is quite possible to restore the fibers if they are not completely atrophied. The causes of KNX atrophy are caused by ophthalmological diseases and various pathological diseases. But there are several main types: hereditary, DNA mutation, Burnevelli syndrome and the presence of a number of other diseases. It is divided into primary and secondary types. If the peripheral neurons are compressed, then the main type of atrophy develops. In this case, the optic disc remains unchanged. The effective combination of the most advanced medical technologies with traditional medicine helps patients achieve significant improvements. In turn, the information received by the retina reaches the brain in a distorted form. The process of development of atrophy occurs slowly. The disease causes irreversible blindness in 21% of cases and disability in 68% of cases. According to the All-Russian Society of the Blind, atrophy of the optic nerve (in 32% of cases) is one of the main causes of blindness and low vision in children. It is the result of various diseases of the eye and central nervous system, usually accompanied by oculomotor disorders (strabismus, nystagmus) and causes a significant decrease in visual function during infancy. Diseases of the optic nerve are very common among eyeball pathologies. Therefore, the development of pathogenetic treatment measures aimed at the treatment of atrophy of the retina and optic nerve and their systematic application to practical medicine is considered one of the urgent problems of modern ophthalmology.

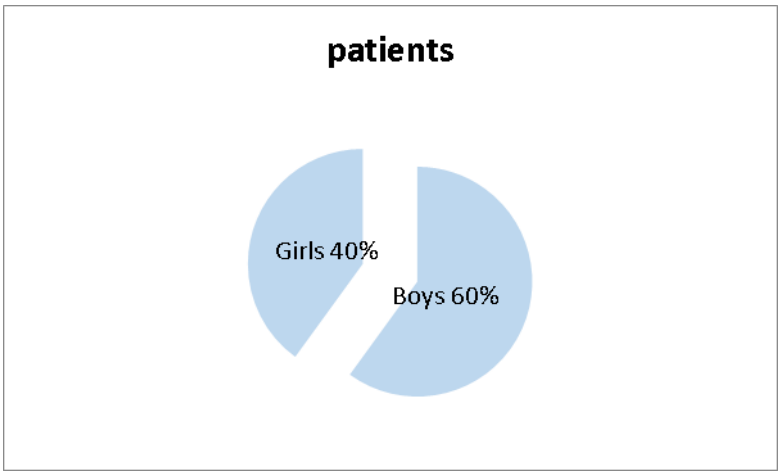
Purpose: to evaluate the effectiveness of neuroprotective drug (retinalamine) and laser stimulation in diseases of the optic nerve.

MATERIAL AND STYLE

20 patients were examined in the children's department of RIKMIATM Bukhara branch. Children's age ranged from 8 to 16 years, of which 12 (60) were boys, 8 (40%) were girls. All patients underwent standard ophthalmological examinations (visiometry, refractometry, OCT, pneumotonometry, A-Vscan). Patients received treatment methods in an inpatient setting. Children were divided into 2 groups. In the 1st group, 10 children were treated in the traditional way (lymphostimulation). Lymphostimulation and laser stimulation were performed in the 2nd group. In the 1st group, conventional treatment: for lymphostimulation, emoxipin 0.5ml per temple area, ascorbic acid and riboflavin solutions were used, and the lymph nodes of the lower jaw were stimulated. In the treatment of the 2nd group: retinalamine 0.5 ml, ascorbic acid and riboflavin solutions were used under the skin. Laser stimulation using the MAKDEL-08 device was 5 minutes.

RESULTS AND THEIR DISCUSSION.

The visual acuity of 7 patients (70%) of the 1st group of patients who underwent treatment was 0.05-0.08 before treatment, 3 patients (30%) were 0.1-0.2 before treatment, and after 1 course of treatment, visual acuity In 7 patients it was equal to 0.1-0.2, and this effect was maintained for 5-6 months. 3 had a visual acuity of 0.3-0.4, and this effect did not change during the next 6 months, and after 6 months the visual acuity gradually decreased.



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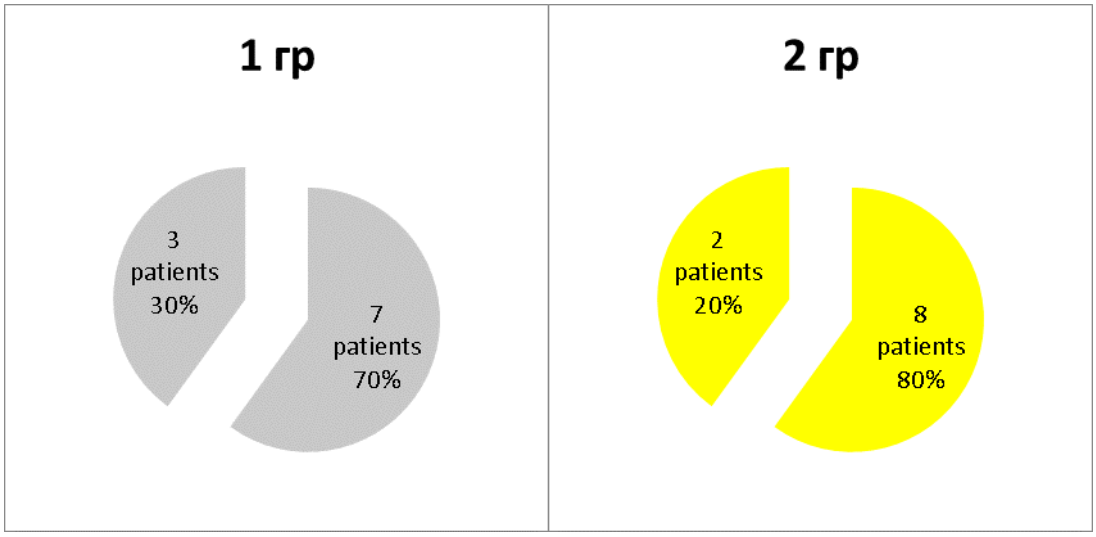

In this case, the effectiveness of the treatment remained unchanged for 4-6 months, and in the following months it began to gradually decrease.

Visual acuity in 8 (80%) of the 2nd group of patients who underwent treatment was 0.07-0.08 before treatment, in 2 patients (20%) it was 0.09-0.1 before treatment, and after 1 course of treatment, visual acuity It was equal to 0.2-0.3 in 8 patients. In 2, the visual acuity was equal to 0.4-0.5, and this effect remained unchanged for the next 6-8 months.

CONCLUSION

1. In the treatment of optic nerve atrophy in patients with optic nerve atrophy in the department of children's department and medical institute of RIKMIATM Bukhara branch, laser stimulation with MAKDEL-08 device in combination with retinalamine drug and very positive results were achieved.
2. None of the patients who participated in the treatment procedures by injecting Retinalamine solution under the skin had any side effects of the drugs. The effectiveness of lymphostimulation with retinalamine solution gave a positive result in all patients who participated in the treatment, the visual acuity of the patients improved significantly.
3. Along with visual acuity, positive changes in the field of vision were also observed, leading to improvement in peripheral vision. As a result of the combined use of treatment methods with the help of lymphostimulation, retinalamine and MAKDEL-08 device, the regenerative properties of the eyeball tissues were further improved, the nutrition of the retina and optic nerve, the strength of the blood vessel wall was further improved, and the visual functions were improved.

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