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DEVELOPING VISITOR IN MYOPIA SCLEROMALACIA PREVENTION AND COMPLEX APPROACH TO TREATMENT

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Annotation: A comprehensive approach to the prevention and treatment of scleromalacia, one of the severe complications of myopia, requires various treatment methods. The course of this disease complete clinical examination , optical correction , functional and medicine therapy . Strong muscles and mi o pik eyes hemodynamics improving antioxidant and vasoconstrictive to the effect local and systemic medicines about word was conducted . Glasses with the help of of targeted optical correction modern methods , optical reflection to make methods , locomotion system for exercises and in children , accommodation status, different physical and in hardware techniques given . General physical activity , physical exercises and of sport to the goal compatibility , especially open in air , but in conditions of hypoxia to see organs condition with related known restrictions with is displayed . Complex treatment modern approaches and main standards in "clinical recommendations". own on the contrary found .

Key words : myopia , functional treatment , antioxidant , accommodation .

It is known that myopia is the most common refractive pathology, its frequency in the lower grades of school is 6-8%, and by the end of school, that is, by the age of 17, it is at least 25-30% [1]. In gymnasiums and lyceums, this figure reaches 50%, which is associated with even stronger and longer-term visual loads, prolonged computer work and frequent use of other electronic devices [2]. The distribution of myopia in the world is uneven: the maximum figures are observed in Southeast Asia: South Korea - 96.5% [3], China - 80% [4], Singapore - 73.9% [5], Hong Kong - 61.5% [6]. The minimum rates of myopia in young people are also observed in African countries - about 11% [7]. According to the forecast of B. Holden et al., by 2050, 49.8% of the population will be farsighted, of which 9.8% will have high myopia [8]. In an unfavorable course, myopia causes the development of retinal pathology, which in severe cases leads to an irreversible decrease in corrected visual acuity and visual disability in the workplace. Early acquired myopia, which occurs in preschool children, usually has a particularly unfavorable prognosis [9]. In recent years, based on data on the role of impaired accommodation in the genesis of myopia, methods have been developed to prevent its development by influencing the accommodative apparatus of the eye with the help of physical exercises and drugs [10-13]. Methods of drug action in myopia The pathogenetic effect on the myopic process is provided by drugs that improve the ciliary muscles and hemodynamics of the eye. Medicines that act on the ciliary muscles In foreign literature, instillation of different concentrations of cholinolytic atropine is suggested for the medical control of myopia. It is known that M-cholinolytics have a cycloplegic effect by affecting the circular and meridional part of the ciliary muscle fibers - Brucke's and Müller's muscles. Usually, drug treatment, including trophic agents that improve hemodynamics in myopic eye tissues, are conducted at home 2 times a year [35-47]. Vitamin and mineral complexes are widely used in the treatment of myopia. Lutein and zeaxanthin, carotenoids

that form the basis of macular pigment, protect the eyes from optical and oxidative stress characteristic of progressive myopia. According to various authors, these substances help to improve the rheological properties of blood, because they reduce the tone of the vascular wall and contribute to its strengthening. Beta-carotene cells reactive oxygen species and free radicals from the influence protection . It should be noted that the use of computer bioelectric correction of the cortical activity of the visual analyzer with increased progressive myopia is not recommended [36, 38, 66]. It is advisable to use this method for a specific purpose - for the treatment of amblyopia. After such a training course, with progressive myopia, it is possible to increase the level of accommodation and even develop partial spasm of accommodation. The use of computer programs for the treatment of amblyopia and other pleoptic methods for increased progressive myopia is not recommended [35, 36, 38]. Such training enhances the dynamic refraction of the eye, increases the usual accommodation and accommodation, and causes a faster progression of myopia. General measures that limit the physical activity of people with myopia, as recently recommended, are recognized as incorrect. On the contrary, the important role of physical culture in the prevention of myopia and its development is shown, since physical exercises contribute to the general strengthening of the body, the activation of its functions, the improvement of the functioning of the ciliary muscles and the strengthening of the scleral membrane of the eye. Special exercises are replaced by exercises to strengthen the muscles of the back and neck, the anterior abdominal wall, as well as breathing exercises. Outdoor games are an excellent means of training the body, improving the emotional state of the players, as shown in a recent study. Morgan [69], such physical activity in the fresh air, together with other medical means, makes a significant contribution to the prevention of the occurrence and development of myopia. It is 15 мrecommended to conduct games with short fast runs (10-), passing and catching the ball, shooting at a wall or target. At the same time, after performing cyclic exercises of considerable intensity (pulse 180 beats / min and above), as well as gymnastic equipment, jumping rope, acrobatic exercises, pronounced ischemia of the eye is noted, which lasts for a long time and is accompanied by a deterioration in the functioning of the ciliary muscles. Currently, the degree of admission to various types of sports for diseases of the organ of vision, in particular, refractive errors, has been determined [71], which should be taken into account when giving individual recommendations to children and adolescents with myopia. **In conclusion** , effective prevention of the development of progressive myopia as a multifactorial ophthalmopathology requires an integrated approach, including various methods of targeted therapy, functional effects and drug therapy. Modern approaches and standards of complex treatment are reflected in the clinical indications. When prescribing an adequate treatment complex, a separate approach is necessary, taking into account the health of the child and the functional characteristics of his visual organ, which will stop the development of myopia and prevent the development of irreversible pathological changes in the fundus of myopic genesis.

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