

MYOPIA DISEASE AND ITS MODERN TREATMENT METHODS

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Annotatsiya: *In newborns, the eyelids are small, and when the child is 9-12 years old, it takes a normal shape. Sometimes the eyelid becomes elongated, and the distance from the pupil to the retina increases. In this case, the parallel rays coming from distant shapes do not reach the retina of the eye, they are refracted in the middle of the path and are focused, as a result, the shape of the visible object is not clearly reflected on the retina, and the person does not see well in the distance.*

Myopia is divided into three levels: mild - up to 3.0 D, medium - from 3.0 D to 6.0 D, and strong - above 6.0 D. The degree of myopia is determined by the refractive power of the glasses. The lens of the glasses refracts the light so that the visible image falls on the retina. Myopia strains the membranes of the eyes (proteinaceous, vascular, retinal) and muscles, they stretch and the optical axis of the eye becomes longer, as a result of which myopia becomes stronger, which reduces the ability of the eye to see.

Key words: *Accommodation, contact lenses, eye strain, congenital myopia, excimer - laser correction.*

Accommodation (the ability of the pupil to thicken and thin) has a great influence on the aggravation of myopia. In general, myopia is more common in people with impaired eye accommodation, and it also depends on the breed. In order to reduce myopia, it is necessary to pay attention to the initial signs. For example, if a student does not like writing on the board from a distance, reads a book while bending over, or tries to sit in the front row of cinemas or theaters, he should immediately consult an eye doctor. After a thorough examination of the pupil, the doctor recommends glasses or contact lenses if necessary. In order to prevent myopia, it is necessary to observe eye hygiene, not to strain the eyes, not to bend down for a long time, not to bend the head suddenly. In severe myopia, it is necessary to follow the doctor's advice. The appearance of myopia in children is mainly associated with genetic predisposition. The tendency to develop myopia is often passed on to children from their parents. In addition to genetics, the development of myopia depends on the strain of the child's vision at close distances (reading or working on the computer). If the eye muscles, which are responsible for focusing vision at close distances, work with tension for a long time, they cannot relax when looking at a long distance during near work. As a result, the eye is always in a state of tension, which leads to the development of myopia. The appearance of myopia in children is mainly associated with genetic predisposition. The tendency to develop myopia is often passed on to children from their parents. In addition to genetics, the

development of myopia depends on the strain of the child's vision at close distances (reading or working on the computer). If the eye muscles, which are responsible for focusing vision at close distances, work with tension for a long time, they cannot relax when looking at a long distance during near work. As a result, the eye is always in a state of tension, which leads to the development of myopia.

Many scientists emphasize that the development of myopia in children is related to general diseases of the body. Therefore, timely treatment of scoliosis, tonsillitis, childhood infections, caries and other chronic diseases in children is very important to prevent myopia.

A child's proper nutrition also plays a big role in his eyesight. Because the same type of food, lack of vitamins can sometimes lead to the development of myopia in children. Unlike poor country children who spend most of their time in the nature and eat fruits and vegetables and various other foods, he usually spends time in his room and instead of eating well, he eats this thing in various places. Myopia is common among students.

Poor lighting of the study area at home and in the classroom, and the fact that the desk is not suitable for the child's height, sometimes cause great damage to the child's eyes. Also, sitting incorrectly during class preparation, working too much at the computer can lead to the development of myopia. Harmful habits, such as writing or reading with the head bent too far, cause eye strain.

Congenital myopia. Parents with myopia should take their child with good eyesight to an ophthalmologist once a year, taking into account that the disease is passed from generation to generation. This does not necessarily mean that vision problems will occur. But the risk of disease is 60-80 percent. Congenital myopia is very dangerous, because of this, distorted, blurred images reach the brain. That is, the ability to see does not develop in the cells of the cerebral cortex - the parts of the brain that stabilize the ability to see. If these problems in a child are not detected in time, he will not see well later, because the corresponding part of the brain will be improperly developed. If the treatment is started on time, it is possible to reduce the effect of the genetic factor and make the life of the child much easier. In most cases, if treatment measures are taken, the child will overcome myopia by the age of 6 and completely recover his vision.

In order to detect the disease in time, it is necessary to constantly check the child's eyesight (especially at one year old, when he turns 3 years old, and then every two years).

Such tests are especially important if the parents have developed myopia at a young age or have other problems with their vision.

Myopia, like other diseases, is important to diagnose as early as possible. But it's difficult to diagnose young children because they can't clearly explain what's bothering them. Do not forget that if the baby's gaze is constantly on his face, on his toys, he is

playing, if he is afraid of light, brings things too close to his eyes, if he constantly collides with household appliances, then he must be seen by an ophthalmologist. It is necessary to take it to the rig. You should also pay attention to the child's capriciousness and fear of being alone in the room. Because the child does not like the things around him, he can feel fear.

Wearing glasses is also a treatment. One of the main methods of myopia correction is glasses. It is wrong to think that if a child wears glasses, he should never take them off. In the mild degree of myopia (up to 3 diopters), glasses are prescribed only for viewing distant objects. If the child is satisfied without glasses in his daily life, he should not be forced to wear glasses all the time. Glasses are prescribed for permanent wearing only in case of a high degree of myopia or a very rapid decrease in visual acuity.

Treatment of children's eyes consists of exercises on special equipment, drug treatment and surgical methods. The goal is to stabilize the process of elongation of the eyeball and stop the progression of the disease. Modern medical methods are able to solve any complex problems and preserve vision in 80 percent of cases when the disease is detected in time and properly treated.

One of the most effective methods of treating myopia is excimer laser correction. According to the individual program, the cold light of the laser "irons" the cornea and removes all the distortions in it. This creates a standard environment and conditions for optimal refraction of light, as in people with good eyesight. But this surgical method is recommended in cases where myopia has not increased within 3 years, and it is best not to use this procedure until the age of 18-21. However, in some cases, it is possible to use surgery without waiting for the recommended age. Only for children, this method is prescribed with very specific instructions, for example, in cases of high unilateral myopia.

Children should be examined by an ophthalmologist (at the age of 3 and 6 months). If the problem is not detected, the next examination is carried out at one year of age. Children from 1 to 3 years old should be examined by an ophthalmologist every six months, and children from 3 to 7 years old should be examined by an ophthalmologist once a year.

When using modern technical devices, children can protect their eyes from myopia if they follow special procedures. For example:

- The monitor should be bright enough.
- The distance to the computer should not be less than 45 centimeters.
- The larger the font, the lower the risk of myopia.
- The child's head should not deviate excessively to one side.

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