SERIOUS EYE CONDITION - MYOPIA

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Abstract: *Nowadays, about 22% of the world population are myopic and this result is expected to increase to 52% by 2050 which shows that myopia is a visual impairment that needs to be addressed today, from children to adults. Therefore, I am going to write about it.*

Key words: *myopia, short-sightedness, environment, time outdoors, genes.*

WHAT IS MYOPIA?

Myopia or short-sightedness is an eye condition in which causes difficulty in seeing objects far away clearly.

WHAT CAUSES MYOPIA?

Several different factors are thought to lead to abnormal elongation of the eyes. Genetic predisposition, environmental factors associated with urbanisation, increased near work and lack of time spent outdoors are all thought to be risk factors associated with myopia[1].

- Genetics.

Genetics has a great influence on myopia. There is a possibility that this eye disorder can be passed from generation to generation, from parent to child[2].

- Screen time.

Researches has shown that, any kind of digital devices screen rays impact your health especially, eyes[2].

- Environmental conditions.

Spending time outdoors has a prospective affect for the onset of myopia: 76 minutes a day spent outside reduces the risk of myopia by 50%[2].

- Prolonged close-up activities.

When you engage in near work activities such as reading, using electronic devices, or doing close-up tasks for extended period of time, it can put strain on your eyes and may contribute to the progression of myopia[2].

HIGH MYOPIA AND ITS RISKS

High myopia increases the risk of blinding eye conditions, so regular follow-up is essential. High myopia is said to occur when a person's myopia progresses until they need -5 dioptres. Myopia continues to place an individual at an increased risk of sight-threatening diseases, including glaucoma, cataract, retinal detachment, myopic maculopathy or myopic macular degeneration. People with high myopia have longer eyes, which means that the retina is more stretched and therefore prone to pheripheral retinal tears. In addition, myopic eyes have a degenerate vitreous that is more likely to collapse and separate from the retina, also increasing the risk of retinal tears.

CAN MYOPIA BE PREVENTED?

Encouraging children to spend more time outdoors and reducing close-up activities can postpone the onset of myopia, thereby decreasing the likelihood of developing severe myopia and its associated complications. Children who develop myopia at a young age are at greater risk of developing high myopia (more than 5 diopters of correction), which increases the risk of eye conditions such as retinal detachment, macular degeneration, open-angle glaucoma, and cataracts. Preventing and delaying the onset of myopia is one of the most cost-effective ways to address these risks. The recent increase in myopia prevalence is likely influenced by environmental factors, including urban or rural living environments, indoor versus outdoor activities, and seasonal variations in eye growth. However, it may be possible to modify these environmental factors to reduce or delay the onset of myopia. Early intervention is important as early-onset myopia leads to faster ocular growth and greater annual progression during the developmental years, resulting in higher levels of myopia[3].

CONCLUSION

Myopia is a prevalent eye disorder, and it's crucial to take urgent steps to manage its increasing occurrence. While there have been advancements in understanding the genetic aspects of myopia, there is still more to explore. It's important to consider environmental factors that play a significant role in myopia development, and patients should be informed about the available treatment choices.

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