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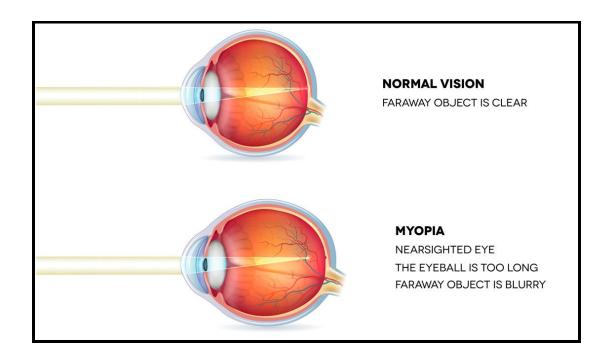
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MYOPIA CARE

1. What is Myopia?

Your child has a condition called *Myopia* or *Nearsightedness*. This means that your child's vision close up is good but far away is blurry. Myopia will continue to increase until he/she is approximately twenty or twenty-one years of age. As this occurs, your child's vision will get significantly worse every six months to a year.



2. What causes myopia to increase?

While the medical community is not exactly sure why myopia is increasing, the data point to some causes:

- A) Heredity. Parents with high prescriptions often have children with high prescriptions.
- B) Kids who study a lot or do a lot of near work
- C) Increase use of electronic devices, especially close to their face
- D) Lack of outdoor play

This video explains in more detail.

https://youtu.be/xK6-At8sqFU

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3. Why is Myopia Progression so bad?

What concerns doctors about progressive myopia is that it is linked to increase risk of ocular disease. High myopia is scientifically proven to be associated with an increased risk of developing sight threatening eye diseases later in life such as cataracts, glaucoma, macular degeneration and retinal detachment. (www.ncbi.nlm.nih.gov/pubmed/8484366; please note the last couple of lines of the abstract). Also, see the chart below:

What we want to be able to do is to Reduce the risk of progressive myopia.

Myopia Increases the Risk of Serious Sight-Threatening Complications			
	Relative Risk of Ocular Disease Secondary to Myopia Compared to Emmetropia ¹		
CONDITION	-2.00 D	-5.00 D	-8.00 D
Myopic Macular Degeneration	2.2 x higher	40.6 x higher	126.8 x higher
Retinal Detachment	3.1 x higher	9.0 x higher	21.5 x higher
Cataract	2.1 x higher	3.1 x higher	5.5 x higher

References

- Flitcroft, D. I. (2012). The complex interactions of retinal, optical and environmental factors in myopia aetiology. Progress in retinal and eye research, 31(6), 622-660.
- Vongphanit, J., Mitchell, P., & Wang, J. J. (2002). Prevalence and progression of myopic retinopathy in an older population. Ophthalmology, 109(4), 704-711.
- Ogawa, A., & Tanaka, M. (1988). The relationship between refractive errors and retinal detachment--analysis of 1,166 retinal detachment
 cases. Japanese Journal of Ophthalmology, 32(3), 310-315.
- 4. Lim, R., Mitchell, P., & Cumming, R. G. (1999). Refractive associations with cataract: the Blue Mountains Eye Study. Investigative Ophthalmology & Visual Science, 40(12), 3021-3026.

4. What if my child wears glasses or soft contact lenses?

Regardless, your child's nearsightedness will continue to progress even if glasses or soft contact lenses are worn on a regular basis to correct your child's nearsightedness. In fact, glasses and conventional contact lenses contribute to the problem because they don't address the underlying fundamental problem of the stretching of the retina. Here's a video that explains further. https://youtu.be/OWp-h7ZiUtQ

5. What can I do to prevent my child's vision from getting worse?

First, I recommend lifestyle changes. This includes:

a) Reduce device use

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- b) Take frequent breaks while studying
- c) Increase outdoor play
- d) Adjust posture while doing near work. Shouldn't be sitting too close to the screen or study material. <u>Here is a helpful guide to adjusting study posture.</u>

This video explains what Parents Can Do Today: https://youtu.be/KgbCf_0fR_o

Although for many kids, this is not enough because their prescription is already very high given their age.

Second, there are other options such as:

- 1. Atropine Drops
- 2. Orthokeratology (Ortho-K)
- 3. Dual Focus Contact Lenses

Orthokeratology (Ortho-K) is probably the most effective option that has worked for many in your child's situation. Here are some video testimonials of parents and kids in Monroe who have experience with it. YouTube Video: https://www.youtube.com/watch?v=sh-47KEenl&t=21s

6. What is Orthokeratology?

Orthokeratology (Ortho-K) or is a non-surgical procedure to reduce one's nearsightedness. Orthokeratology is the science or program of therapeutic application of contact lenses to alter the curvature of the cornea (front part of the eye), especially to reduce nearsightedness and certain types of astigmatism (*Dictionary of Visual Science*).

This video explains how Ortho-K works. : https://youtu.be/HZQEoIP- 44

We have to do an evaluation and perhaps your child may be a candidate for Orthokeratology (Ortho-K), which is very effective in managing progressive myopia, while allowing them to be free of glasses or contact lenses during the day.

What the medical literature shows us with clinical studies is that Ortho-K lenses worn at night, helps to slow down myopia progression, thereby reducing the ocular risk such as the ones mentioned above. That's really our goal here is to reduce the risk by reducing the progression of myopia.

The National Institute of Health cites this study which demonstrates the effectiveness in Ortho-K for reducing the progression of myopia. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4542412/

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Orthokeratology:

- 1. Ortho-K lenses are FDA approved to be worn overnight.
- It is safe, non-invasive, and reversible.
- 3. Rigid contact lenses customized for a patient's unique eye shape worn at bedtime, much like retainers for the teeth, using corneal mapping technology reshape the patient's eye in a gentle manner.
- 4. In just a few nights, patients will no longer need glasses or contacts during the day, thus enhancing their quality of life.

In Summary, I believe that we must do everything we can to help prevent progression of myopia in your child to help prevent future problems giving our children the best chance of future success. There is a small window of opportunity for intervention now and we hope you take advantage of the various options to benefit your child and safeguard their vision.

Thank you.

Additional Resources:

- 1. Dr. Shefali Miglani's Myopia Care Video Learning Center
- 2. Ortho-K Lens Barbara Walters on The View TV Show
- 3. Ortho-K on ABC News with Peter Jennings
- 4. The Case for Myopia Control Now.pdf
- <u>5. Controlling myopia progression in children and adolescents National Institute</u> of Health
- 6. All about vision Myopia Control



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