

Is Myopia Treatment Right for Your Child?

Your child may have inherited your charming freckles, but if you're nearsighted, she may inherit your myopia as well.

Also known as nearsightedness, this eye condition is caused by an elongation of the eye that blurs distance vision. Children are especially at risk as they grow and develop. According to eye health experts, myopia rates have nearly doubled since the 1970s.

If you have a family history of this vision problem, get your child's eyes checked as early as one year of age, since it's often passed down from parent to child. If you wear distance eyeglasses for myopia, your child is twice as likely to develop this eye condition. If *both* parents wear distance eyeglasses, there is six times the risk your child will develop myopia.

"With genetic myopia, I measure the infant's eyes for myopia early. Any sign of pre-myopia or myopia progression is cause for concern and intervention," says Dr. Susanna Tamkins, a pediatric optometrist at Bascom Palmer Eye Institute. While treatment is more effective if started early, it's always beneficial to get an eye examination and discuss treatment choices with your child's pediatric eye doctor.

What can you do?

Parents who want to give their children an edge over this common eye health issue are finding answers at Bascom Palmer. Their pediatric specialists offer many treatments that slow myopia progression or even decrease its chances of starting.

“Myopia is a progressive disease that can lead to vision-threatening retinal damage, so it’s important to control. Regular single vision eyeglasses that are usually prescribed for children have no effect on slowing myopia progression. Treatment with (atropine) eye drops, custom bifocal eyeglasses and special contact lenses are successful in deterring myopia. Statistically, treatments will improve your child’s future vision and decrease their myopic prescription,” says Dr. Tamkins.

What about the eye drops?

In the past, there were few ways to treat nearsightedness. Today, an eye drop treatment that is widely used overseas is producing results.

“Atropine eye drops are one of the easiest, most effective treatments for myopia and preferred by many families,” Dr. Tamkins says. She cites Atropine for the Treatment of Myopia (ATOM), a federally funded five-year research study. “The results are impressive to date. ATOM 1 (first phase of the study) showed a 77 percent reduction in the mean progression of myopia over two years. ATOM 2 (second phase) proved that lower dose atropine reduced myopia increase by 50 percent, with a more permanent change.” The study is now in its third phase. Generally, atropine treatment should start by age 12 and is considered effective up to age 15.

Are there alternatives to atropine?

Yes, says Dr. Tamkins. These include newly available custom bifocal eyeglasses. “There are also many contact lenses designed to slow this progressive eye problem.”

While Atropine and bifocal lenses help nearsightedness, neither is a full cure. As patients approach adulthood and their eyes stop developing, some may qualify for laser vision correction surgery.

Kids and screens

Although it's not yet known if screen time is entirely responsible for the spike in myopia rates, a new study suggests that it contributes to the problem.

"Near or up-close work makes myopia progress; outdoor time is beneficial because it seems to slow progression." Staring at close range for hours, whether at books or screens, causes about three times the risk for myopia increasing, while outdoor time reduces that risk. Just 40 to 80 minutes of daily outdoor playtime decreases myopia rates by 23 to 50 percent.*

Dr. Tamkins agrees with the American Academy of Pediatrics screen time recommendations and the following children's eye health guidelines from the American Academy of Ophthalmology:

- Encourage outdoor playtime.
- Teach kids the 20-20-20 rule: for every 20 minutes of screen time, look 20 feet away for 20 seconds. Or, simply teach kids to look out a window every two chapters while reading. When playing video games, look out a window after finishing a level.
- Keep computers and other digital devices 18 to 24 inches away from the face.
- Set time limits on screen time.
- Remind kids to blink when watching TV and using the computer.
- Adjust screen brightness and contrast so the eyes are comfortable.
- Don't use screens outside or near a window where glare affects vision.

She encourages families to get the condition treated. "The long-term benefits of treatment outweigh any initial effort and investment. We never regret the preventions and early treatments we seek for our children; we only regret what we did not do."

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