

Myopia or short-sightedness in children

Children often have a progressive form of myopia (short-sightedness) that worsens throughout childhood, but their vision is easily corrected with glasses, and it usually stabilises when they reach their 20s.

What causes myopia (short-sightedness)?

Short-sightedness, medically called myopia, is the inability to see objects at a distance clearly. In people with myopia, the eyeball is slightly longer than usual from front to back. Average eye length is 24mm but in myopes it can increase to 25, 26 or longer. Light rays which make up the images you see, focus in front of, rather than directly on the retina, the light-sensitive part of the eye. When this happens, objects at a distance seem blurry and unclear.

Progressive myopia or short-sightedness is predominantly caused by genetics. Children inherit a tendency to develop myopia from their parents. It is generally thought that there is some effect on the way a person uses their eyes, such as often performing detailed or close up work, may also have an influence on the progression of myopia.

How do I know if my child has myopia?

Younger children may not know that blurred vision is not normal. Symptoms may only be found at school with difficult reading whiteboards at the front of the class.

A child with myopia may complain of headaches, eyestrain, and fatigue when having to focus on something more than a metre or so away. Most often, young children with myopia only complain of difficulties seeing things far away. A child with myopia may move closer to objects to see clearly. If your child complains of any of these symptoms, make an appointment with an optician.

It is good to have your child's eyes checked regularly even if you think their eyes are normal. One can begin to get accurate eye tests from the age of three, and then annual visits should be done just like one does with the dentist. Not only does the optician pick up a need for glasses but also any other problems with the eyes particularly lazy eyes. Such conditions need to be treated early.

How is myopia (short-sightedness) treated in children?

A child with myopia should wear glasses. They can also start wearing contact lenses when they are physically mature enough to take care of them. Often this depends on how involved the parents are in caring for the contact lenses. Paediatric ophthalmologists rarely recommend contact lenses before a child enters his or her teens.

Talk to your child's optician to find if contact lenses can help your child.

Can myopia be prevented?

Since short-sightedness is often inherited, it is not possible to totally prevent its occurrence. However, there are steps you can take to minimise its effect. Make sure your child is examined early, especially if there is a family history of progressive short-sightedness or other eye conditions. If it is uncomfortable to do work or watch television from a standard distance, your child may already be developing short-sightedness and needs an examination.

In 2012, researchers from the universities of Bristol and Cardiff reported that children who spend more time outdoors playing when they are aged between eight and nine are approximately half as likely to become short-sighted by the time they are 15.

The study team followed the occurrence of short-sightedness in more than 7,000 boys and girls in the Avon Longitudinal Study of Parents and Children, also known as the Children of the 90s study of children and teenagers in south-west England.

The reasons for the protection playing outside gave against myopia were not clear from the research.

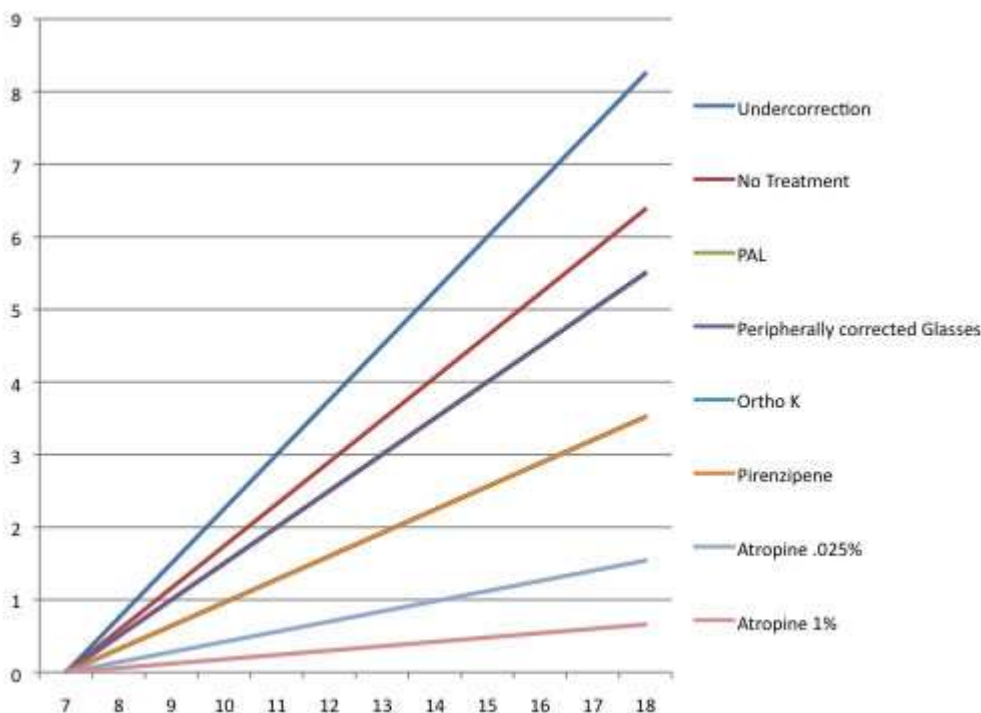
Some experts believe higher light levels outside and a break from focussing on close objects may help.

Adapted From <http://www.webmd.boots.com/eye-health/guide/myopia-short-sightedness-children>

Should Myopia be treated fully with glasses?

Research continues to show that it is better to fully corrected myopia rather than not have glasses or under correct. My view is that the stimulus of blurred vision with no glasses or under correction causes the eye to try and correct itself by growing ie making one more short sighted

The Graph below shows the research and the differences.



Studies using Atropine while help reduce the myopia increase are not practical. Thus the balance is to ensure that Proper corrected glasses are worn and plenty of out door activity.

Contact lenses and laser?

Many people use contact lenses and these are a good way of correcting especially higher degrees of short sightedness. In children they can be worn if there is good parentally and optometric support.

Refractive Laser surgery is a definitive step and can only be repeated a few times. Thus should only be undertaken once the myopia is stable and settled usually around 21 years old. Further changes may occur but tend to be small but if significant can be corrected with laser augmentation.

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