



Lazy Eye:

It's Not What You Think

Misunderstood Childhood Disorder May Threaten Sight

There is much confusion over the term “lazy eye.” Children who are unable to focus their eyes in the same direction are often referred to mistakenly as having lazy eye. In fact, children who appear to have weak eye muscles, preventing the eyes from working as a team, may be suffering from two separate conditions.

The inability to point both eyes in the same direction accurately, which makes the eye appear lazy, is called strabismus. If it is not treated, strabismus may result in a vision development problem in the brain known as amblyopia—also called lazy eye.

Vision develops in children between birth and age 10 to 12. During that time, the eye and brain learn to work together. A child whose vision is developing normally will combine the two images from the left and right eyes into one picture for the brain to interpret.

A child who is unable to focus both eyes on the same object sees two different pictures. The brain does not know how to combine these pictures in a way that makes sense, so it ignores the image from the weaker

eye and chooses to interpret only the image sent by the stronger eye. This condition, in which the brain ignores pictures sent by one eye, is amblyopia.

What Causes Amblyopia?

Any eye condition that causes the quality of the image seen by one eye to differ from that of the other eye can result in amblyopia. It happens when the brain begins to ignore the poorer quality image.

If amblyopia is detected and treated early, most children’s vision will improve. The first step is to correct the underlying vision problem that “turned off” the child’s brain to the affected eye. These include:

Strabismus - Can sometimes be treated successfully with exercises to strengthen the eye muscles. These must be prescribed and overseen by an eye care professional. (Note: Sometimes an infant’s healthy eyes seem to cross or point outward due to facial appearance, a condition called pseudostrabismus. Normal development resolves the issue as the bridge of the nose narrows and the eyes are able to open wider.)

Unequal visual acuity. When one eye is more nearsighted, farsighted or astigmatic than the other, the brain may ignore the image from the weaker eye. Corrective eyeglasses or contact lenses usually solve the problem.

Blockage. A cataract, eye trauma, droopy eyelid, eyelid tumor or difference in size or shape between the two eyes can block vision and cause amblyopia. Surgery is often the answer.

Connecting the Eye & Brain

Once the underlying cause of amblyopia is resolved, the “disconnected” eye must be developed so that it will be able to see normally. This is accomplished by forcing the child to use only the weaker eye, in order to help the brain develop a more complete connection to it.

Eye care professionals use one of two methods to prevent use of the stronger eye: covering it with an eye patch or administering vision-blurring eye drops. Both are equally effective, although drops are often preferred, especially for very young children.

While not all patients with amblyopia will respond equally to treatment, many can achieve significant improvement, especially with early detection and intervention.

Exams Are Critical

Amblyopia is the most common cause of childhood vision impairment, according to the National Eye Institute. Untreated amblyopia can inhibit learning. Because most learning takes place visually up to age 12, vision impairment alters the way a child understands the world and functions in it.

Because amblyopia usually occurs in only one eye, many parents and children are unaware of the condition. That’s why regular comprehensive eye exams are crucial. Many parents don’t get their children’s eyes examined until after they start school, and sometimes rely solely on school vision screenings, which can miss up to 60% of eye problems.

The American Optometric Association recommends comprehensive eye exams for children by the age of 6 months and again at age 3. Once kids are in school, they should see an eye care professional on a regular basis for a thorough evaluation.

Amblyopia will not go away on its own. Without treatment, the connection between the brain and

the affected eye might never develop properly. In fact, most of the estimated 6 million Americans with amblyopia are adults who were not treated (or not treated early enough) to reverse the problem. Amblyopia alone is responsible for more vision loss in people age 45 and younger than all other eye diseases and trauma combined for that age group.

It is critical that aggressive evaluation, prevention and treatment of amblyopia be pursued early in a child’s life, while vision is still developing. The healthy development of your child’s precious eyesight must not be taken for granted.

Sources: National Eye Institute, The Eye Digest, American Optometric Association, Medline Plus, Prevent Blindness America

