

Amblyopia



Amblyopia is a decrease in vision which is different from being nearsighted or farsighted. Patients with amblyopia do not see perfectly clearly with the affected eye, even with glasses or contacts. Amblyopia can be mild or very severe. People with amblyopia have a problem with **how the brain understands visual information** the eye is sending it. Amblyopia will usually only affect one eye.

Amblyopia occurs when the brain chooses to rely more heavily upon one eye and begins to ignore the other. When we are young, the part of the brain responsible for clear vision can only develop normally if it is constantly stimulated by clear visual information from each eye. Anything that keeps both eyes from sending equal amounts of good

quality information to this part of the brain can result in the under-stimulated part of the brain not developing properly.

Amblyopia can occur if the eyes are misaligned (strabismus) and the brain chooses to rely upon the eye which remains straight. It can also occur if there is a physical blockage to vision in one eye, such as a cataract or a very droopy eyelid (ptosis). Finally, amblyopia can occur when there is a very large difference between the prescription strength in one eye compared to the other eye (anisometropic amblyopia).

People who are nearsighted or farsighted or who have astigmatism have a problem with **how the light rays are focused within the eye**. Clear vision may be attained by these patients if they begin to wear the proper glasses prescription. Since amblyopia is a problem with how the **brain** processes information, it normally cannot be corrected simply by prescribing glasses.

Amblyopia is treated by helping the brain learn to use the eye it has been ignoring, almost like rehabilitation of the eye. This is accomplished by wearing an adhesive eye patch over the eye with better vision so the eye and that part of the brain with the blurry vision has a chance to become stronger. In some cases, eye drops may

accomplish this just as well. Patching usually involves 2 or more hours a day over a period of months, depending upon how severe the amblyopia is. This can be challenging, especially with young children, but it is crucial that amblyopia be treated as early as possible to give the child the best chance for normal vision later in life.

The part of the brain which is responsible for clear vision develops very early and rapidly in a child's life and finishes developing around age 7-9 (sometimes later). Amblyopia must be treated as early as possible in this developmental process. Once the visual part of the brain stops developing, amblyopia usually cannot be reversed.

The good news is that amblyopia typically responds very well to patch therapy. Children from infants to 4 or 5 years of age often see rapid improvement with consistent patching therapy. Older children from about 5 to 9 years of age may need to wear their patch for more hours of the day and perhaps for a longer period of months, but may also see great improvement in their vision.

More information is available at the following websites:

<http://med-aapos.bu.edu/aapos.html>

<http://nei.nih.gov/health/amblyopia>

The Eye Patch Club offers information and activities for children who are being treated for amblyopia:

<http://www.preventblindness.org/children/eyepatchclub.html>

To order Ortopad eye patches, go to www.eyecareandcure.com or call 1.800.678.6723