



*Advanced Valley Eye Associates*

Robert B. Miller, M.D.

2035 Lyndell Terrace  
Davis, CA 95616  
(530) 757-6000  
[www.lasikbymiller.com](http://www.lasikbymiller.com)

## Amblyopia, or “Lazy Eye”

A common vision problem in children is amblyopia, or “lazy eye.” It is so common that it is the reason for more vision loss in children than all other reasons combined. Amblyopia is a decrease in the child’s vision that can happen even when there is no problem with the structure of the eye. The decrease in vision results when one or both eyes sends a blurry image to the brain. The brain then “learns” to only see blurry with that eye, even when glasses are used. Only children can get amblyopia. If it is not treated, it can cause permanent loss of vision.

### TYPES OF AMBLYOPIA:

**STRABISMIC AMBLYOPIA** develops when the eyes are not straight. They may turn in, out, up, or down. When this happens, the brain “turns off” the eye which is not straight, and the vision subsequently diminishes in that eye.

**DEPRIVATION AMBLYOPIA** develops when cataracts or similar conditions “deprive” young children’s eyes of visual experience. If not treated early on, these children can have very poor vision. Sometimes this kind of amblyopia can affect both eyes.

**REFRACTIVE AMBLYOPIA** occurs when there is a large or unequal amount of farsightedness or astigmatism in a child’s eyes. Usually the brain will “turn off” the eye that has more farsightedness or more astigmatism. Parents and pediatricians may not think there is a problem because the child’s eyes may stay straight. Also, the “good” eye has normal vision. For these reasons, this kind of amblyopia in children may not be found until the child has a vision test. This kind of amblyopia can affect one or both eyes and can be helped if the problem is found early.

### WILL GLASSES HELP?

While sometimes glasses will improve the vision, but they cannot correct to “20/20” perfection. With amblyopia, the brain is “used to” seeing a blurred image and it cannot interpret the clear image that the glasses produce. However, with time, the brain may “re-learn” how to see and the vision may improve.

## **HOW IS AMBLYOPIA TREATED?**

### **GLASSES AND PATCHING:**

Early treatment is always best. If necessary, children with refractive errors (nearsightedness, farsightedness, or astigmatism) can wear glasses or contact lenses when they are as young as one year old. Remember, glasses will not improve the vision to 20/20, as the brain is used to seeing blurry with that eye. For that reason, the normal eye is patched to make the amblyopic (weak) eye stronger. Patching should only be done if an ophthalmologist recommends it. An ophthalmologist should regularly check how the patch is affecting the child's vision. Although it can be hard to do, patching usually works very well if it is started early enough, and if the parents and child follow the patching instructions carefully. Sometimes the stronger (good) eye can be "penalized" to help the weaker eye get stronger. Blurring the vision in the good eye with drops or with extra power in the glasses will penalize the good eye. This forces the child to use the weaker eye. Ophthalmologists use the treatment instead of patching when the amblyopia is not very bad, or when a school-aged child will not wear the patch as recommended.

### **SURGERY:**

Surgery on the eye muscles can make the eyes straight. By itself, surgery does not help the amblyopia. Surgery to make the eyes straight can only help make the eyes work together as a team. These children will still need treatment for the amblyopia. Children who are born with cataracts may need surgery to take out the cataracts. After the surgery, the child will usually need vision correction with glasses or contact lenses and patching.

In all cases, the goal is the best possible vision in each eye. Patching does not usually work as well in children who are older than 9 years of age. Patching for older individuals does not usually help enough to make it worth the effort.

### **LONG TERM:**

In some cases, treatment for amblyopia might not work. It is hard to decide to stop treatment, but sometimes it is best for both the child and the family. Children who have amblyopia in one eye and good vision only in their other eye can wear safety glasses and sports goggles to protect the normal eye from injury. As long as the good eye stays healthy, these children see normally in almost every respect.