

Amblyopia 411 Guide

Goals of Amblyopia Treatment

What are appropriate goals of amblyopia treatment?

The treatment goal is the best possible vision in each eye and use of the eye simultaneously (binocular vision). While not every child can improve to 20/20, most can obtain a substantial improvement in vision. Realistic goals depend on the age of the child and the level of vision when the amblyopia is diagnosed.

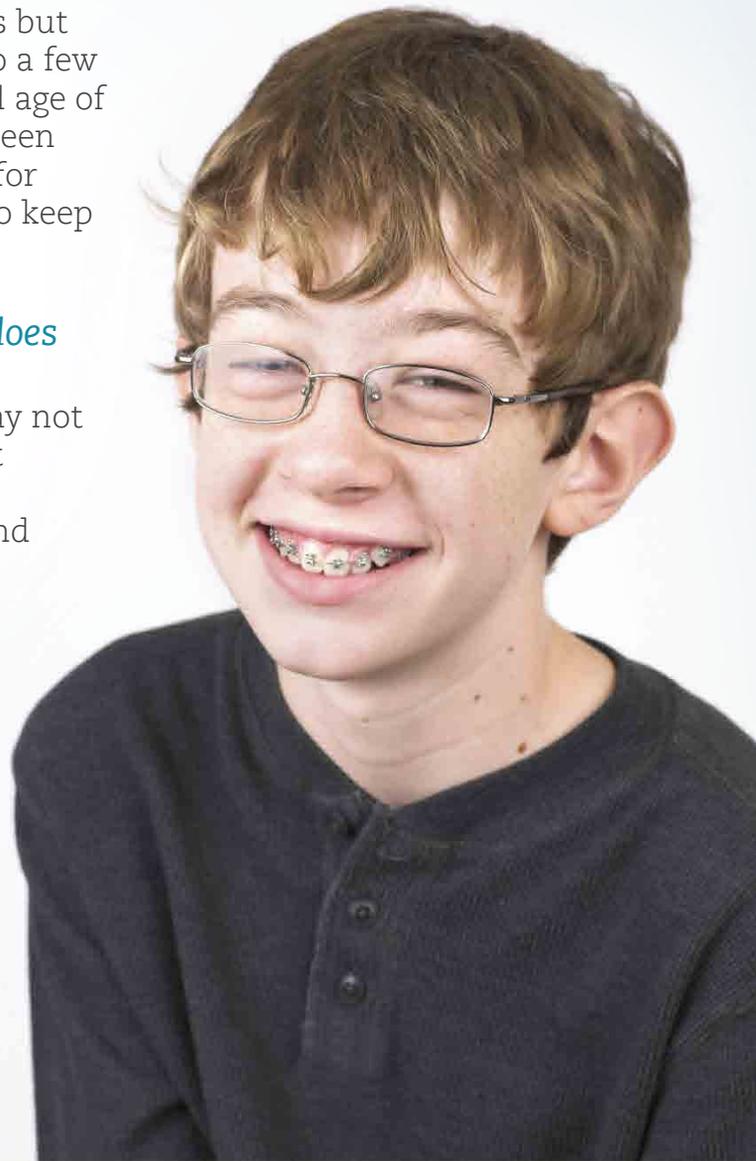
How long does amblyopia treatment last?

Vision usually improves within a few weeks but optimal results may take several months to a few years and depends on the visual acuity and age of diagnosis and treatment. Once vision has been maximized, maintenance treatment until, for example, age 9-10 years may be required to keep the vision from regressing.

What happens if amblyopia treatment does not work?

In some cases, treatment for amblyopia may not substantially improve vision. It is a difficult decision to discontinue treatment, but sometimes that is best for both the child and family. Children who have significant amblyopia in one eye should utilize protective eyewear to protect the better seeing eye from injury.

As long as the better seeing eye remains healthy, normal daily function is expected. There is no surgical treatment for amblyopia. The future holds promise for the development of new methods – including pharmacologic, technologic, genetic and other – but for now, patching and blurring (eye drops) of the dominant eye are the standard therapies.



Tips and Tricks for Patching

The classic patch is an adhesive "Band-Aid" type which is applied directly to the skin around the eye. These are available in smaller sizes for younger children. Cloth patches are appropriate for children who wear glasses, but attention is needed to ensure a child does not look around the cloth patch.

What should my child do while patching?

Activities such as reading, coloring, computer games or watching a favorite TV program while patching sometimes encourages compliance.

Patching at school in older children may be challenging because it may cause problems at school such as difficulty learning, teasing by other children and reduced overall compliance.

What if a child refuses to wear the patch?

Many children initially resist wearing a patch. Successful patching requires persistence and much encouragement from family members, neighbors, teachers, etc. A young child may throw a tantrum, but even this child can eventually learn not to remove the patch. Rewarding a child for successful patching can sometimes help increase cooperation. Usually, cooperation improves as child's the vision improves. The patching calendar on the next page may help to track patching.

The use of arm guards ("no-no's"), which are gentle restraints, may help during the difficult phases of patching therapy. When worn, these restraints prevent most children from removing the patch. Eventually most children learn that the arm guards can stay off if the patch stays on.

Patching Resources

Adhesive patches are available at your local pharmacy and online at:

- ortopadusa.com
- fresnelprim.com
- 3m.com/Nexcare.

Cloth or felt patches may be used over eyeglasses when present. Cloth patches are available at:

- patchpals.com
- framehuggers.com
- fresnelprim.com
- ortopadusa.com
- perfecteyepatch.com

Arm guards, can be found at:

- snugglewraps.com
- pedi-wrap.com .

Patching Calendar

The calendar below can help keep track of patching. Parents have reported that including a reward at the end of treatment can be effective in obtaining cooperation.

PATCHING CALENDAR						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Atropine Therapy for Amblyopia

Remember to wash your hands before and after giving atropine eye drops.

Atropine blurs close-up vision in the better-seeing eye. This encourages use of the eye with poor vision and improves vision in that eye over time. With atropine penalization, you will not have to fight constantly with your child to keep a patch over the better-seeing eye.

Do the drops hurt?

No. Unlike other types of eye drops, atropine drops usually do not sting.

How do I put them in?

With your child lying down and looking up to the ceiling, hold the eye lids apart and place the drop anywhere between the lids. If the child is frightened, try giving the drop before he or she wakes up. In some children it is necessary for one adult to hold the child while the other gives the drop. Eventually a routine will be established, and it will get easier to put the drops in.

What are the side-effects?

Rarely, a child can develop redness and swelling around the eye, or fever, or facial flushing. If this occurs, stop using the drops and call your pediatric ophthalmologist.

How do I store the drops?

They may be kept at room temperature. Be sure to keep the atropine drops out of the reach of children.

I gave a drop of atropine five days ago, and my child's pupil is still dilated; is something wrong?

No. A single drop of atropine may dilate the pupil for up to a week. Although the pupil remains dilated, the blurring effect of the atropine wears off in 1-3 days.

Should my child wear sunglasses, since the pupil is always dilated by the atropine?

Outdoors on a sunny day, your child will be more comfortable wearing sunglasses. If your child already wears glasses, they can be coated with a clear ultraviolet filter, which will help.

How can my child function at school with the better eye blurred?

The atropine blurs the good eye for near work. This forces the child to use the poorer eye for reading. Allow the child to hold reading material close. If the atropine seems to be interfering with school work, call your pediatric ophthalmologist.

How long will I need to use the atropine?

Treatment may be continued for months or even years, depending on the age of the child and the severity of amblyopia.

My appointment is next week should I continue using the atropine drops?

Discontinue the atropine drops one full week before your appointment (or before any surgery) unless your doctor says otherwise.

I put atropine drops in my child's eye, but now my own pupil is dilated. What happened?

You may have forgotten to wash your hands after giving the eye drops. Be careful not to get the atropine in your own eye, or you could have blurred vision and a dilated pupil for up to a week.

If you have any other questions about atropine treatment, please don't hesitate to call your pediatric ophthalmologist.



Medical Policy Statement

Sometimes Needed for Insurance Purposes

Amblyopia is a Medical Condition

A Joint Statement of the American Association for Pediatric Ophthalmology and Strabismus (AAPOS) and the American Academy of Ophthalmology (AAO).

Amblyopia is a medical condition which requires medical treatment. Amblyopia (ICD codes 368.0, 368.00, 368.01, 368.02, 368.03) is typically a preventable and treatable form of vision loss. Unless amblyopia is treated promptly during childhood, structural changes occur in the brain of the amblyopic child, resulting in decreased visual function.

Optical correction such as eyeglasses or contact lenses may be medically indicated as a part of amblyopia treatment in addition to other modalities, such as patching and/or pharmacologic treatment. Unless amblyopia is treated during childhood, vision loss is likely to be irreversible.

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