OHIO AMBLYOPE REGISTRY

Lazy Eye News

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Inside:

Lazy Eye News is the bi-annual newsletter of the Ohio Amblyope Registry. It is designed to highlight the services and resources available through the OAR and bring you the latest news in Amblyopia research and treatment.

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www.OhioAmblyopeRegistry.com

Help Your Child With Patching...

- Have kids personalize patches with their favorite stickers.
- Enlist teachers, relatives, and others to help reinforce patching schedule
- Establish a routine
- Set up a reward program
- Keep all eye doctor appointments

Older Children and Lazy Eye: Is It Too Late?

Richard Liston, M.D.
Pediatric Ophthalmologist

New studies suggest that amblyopia treatment may be more successful in older children than previously thought.

There is no doubt that treatment of amblyopia is more effective when children with amblyopia are identified and treated at an early age (generally less than seven years of age). This fact provides the rationale for screening programs designed to detect children with amblyopia at an early age.

Most of us recognize that the ability to learn a language is much greater in children than in adults. Similarly, the developing nervous system of a child has a critical period of visual development. During this time, the development of good vision occurs and requires a clearly focused image on the retina (the sensory tissue lining the back of the eye). In addition, the brain must actually use both eyes, without overly favoring one eye and suppressing the other eye (which may then become amblyopic). If all goes well, good vision in both eyes will result as the child matures.

> "... a recent study by the Pediatric Eye Disease Investigator Group (PEDIG) has suggested that amblyopia treatment in older children may be more effective than previously thought."

Unfortunately, things do not always go as planned. Screening programs, however effective, do not identify every child with amblyopia at an early age. Other children may be identified early but do not receive adequate treatment when they are young.

Why is early detection and treatment of amblyopia so important? To understand this, it is necessary to understand some important facts concerning visual development in children.

Unfortunately, misalignment of the eyes (strabismus), the need for strong spectacle correction, cataracts, and other conditions may interfere with this normal visual development and lead to amblyopia.

Although not all children mature at the same rate, the critical period of visual development has generally

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Older Kids... *cont. from page 1*

been thought to begin in early infancy and last until age eight to ten years. Traditional teachings and beliefs have been that treatment for amblyopia after the age of 10 years or so is not effective.

However, a recent study (the Amblyopia Treatment Study 3) by the Pediatric Eye Disease Investigator Group (PEDIG), has suggested that amblyopia treatment in older children may be more effective than previously thought.

Over 500 patients with amblyopia between ages seven and 18 were studied by PEDIG. Half of these children were treated with glasses alone and were designated the "control group". The other half, designated the "treatment group," wore glasses, patched the better-seeing eye for two to six hours daily (with at least one hour of near activities) and, used dilating drops in the better-seeing eye to blur the vision in the good eye.

The results from the PEDIG 3 study did not agree with traditional teachings: In younger patients, between seven and less than 13 years old, over 50 percent of the treated patients showed at least two lines of improvement in visual acuity in the amblyopic eye (compared to 25 percent in the control group who wore glasses alone). This included patients who had been treated for amblyopia in the past.

In older children (13 to 18 years of age), only those never previously treated for amblyopia showed a benefit from treatment. Specifically, 47 percent of those treated showed improvement (compared to 20 percent of those in the control group treated with glasses alone).

In the PEDIG 3 study, treatment lasted for four months or until no further improvement in visual acuity was observed. Unfortunately, most seven to 18 year old children in this study who responded to treatment were still left with some reduced vision in the amblyopic eye at the conclusion of the treatment.

At this point, it is not known if the improved vision persisted once treatment has ended. Further studies on this issue are being undertaken and the results will likely be available in a few years.

So what is the take home message? Treatment of amblyopia is possible later in childhood than previously thought. Children age seven to 12 may respond to treatment whether or not they have been treated in the past. Children 13 and older may also respond to treatment, but only if they have never been treated in the past. Please discuss these issues with your child's eye doctor. He or she will help you make the right decision for your child with amblyopia.

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www.OhioAmblyopeRegistry.com

Need Eye Patches?

Lower income families may qualify for additional free patches from the OAR, up to a maximum of 15 boxes. Go to www.OhioAmblyopeRegistry.com for application forms.

Adults with Amblyopia

Larry Leguire, Ph.D., M.B.A.
OAR Program Director

Amblyopia, commonly known as lazy eye, occurs in about 1 in 33 children. Most children with amblyopia are detected, treated and successfully cured of their lazy eye. However, a surprising number of children with amblyopia go undetected until it is too late to successfully treat the lazy eye. These children become adults with amblyopia without treatment options.

There are several reasons why amblyopia is not detected early in life when it is most treatable. Most children simply do not receive an eye exam by an eye doctor. Only about 1 in 4 children ever see an eye doctor before 18 years of age. The reasoning goes: if the eyes look healthy they must be healthy. Unfortunately, many children with amblyopia will look perfectly normal.

Another major reason why amblyopic children become amblyopic adults is that their parents did not follow through with an eye doctor appointment when their child failed a vision screening; for example, at school. It is estimated by the Ohio Department of Heath that as many as 50% of children who fail a school vision screening AND whose parents have been notified that their child failed a school vision screening do not receive a follow-up eye exam. Why? The reasons are numerous but include the following excuses: "He/she can see fine," "he/she looks normal," "no time," "no money, " or "do not believe the vision screening results."

Finally, another reason why children may grow up to become amblyopic adults is that their parents did not follow the eye doctor recommendations for treatment when the amblyopia was discovered. Treatment for amblyopia often involves months of patching the good eye that forces the child to use the lazy eye. This is not an easy treatment and children, naturally, will refuse to wear the patch and will cry, throw temper tantrums, rip the patch off repeatedly, hide their glasses, etc. Some parents will give up after a while and simply say to the eye doctor; "He won't wear his eye patch!" No kidding! Sometimes parents have to be parents and do the hard things in life for the sake of their children's eyesight and their children's future career options.

Top Ten Referring Ophthalmologists

1. Robert Bloom, MD	Dayton, OH
2. Michael Bloom, MD	Dayton, OH
3. Richard Golden, MD	Columbus, OH
4. David Rogers, MD	Columbus, OH
5. Robert Burnstine, MD	Akron, OH
6. Paul Rychwalski, MD	Cleveland, OH
7. Faruk Orge, MD	Mayfield Heights, OH
8. Richard Liston, MD	Dayton, OH
9. Elias Traboulsi, MD	Cleveland, OH
10. Marylou McGregor, MD	Columbus, OH

Top Ten Referring Optometrists

1. Marie Bodack, OD	Cincinnati, OH
2. Sarah Lopper, OD	Cincinnati, OH
3. Amy Keller, OD	Columbus, OH
4. Danielle Saltarelli, OD	Cincinnati, OH
5. Jennifer Fogt, OD	Columbus, OH
6. Jon Mesarch, OD	Logan, OH
7. Cara Frasco, OD	Springboro, OH
8. Sara Schoeck, OD	Westlake, OH
9. DeVon Meyer, OD	Eaton, OH
10. Frank D'Apolito, OD	Warren, OH

Patching Poetry Corner...

Larry Leguire, Ph.D., M.B.A.
OAR Program Director

Hide your glasses, again?
My little son.
Don't whine, don't boohoo.
Don't even think about missing school.

Hiding your glasses
Will not do.
No matter what,
You're going to school.

So tough it out
As many do.
You'll be glad
Santa will be too.

As for the eye patch
You know the rule.
Wear it for two hours a day
Mommy and Daddy will think you're cool.

And at the end of therapy
You'll see fine.
Twenty-twenty vision
Is that little line.

So hang in there
My little son.
And after your therapy
We'll have some fun.

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