Anisometropia

WHAT IS ANISOMETROPIA?

Anisometropia is when the two eyes have a different refractive power (glasses prescription), so there is unequal focus between the two eyes without glasses. This is often due to one eye having a slightly different shape or size from the other causing unequal curving (astigmatism), unequal far-sightedness (hyperopia), or unequal near-sightedness (myopia).

WHY IS THIS A PROBLEM FOR MY CHILD?

Anisometropia can cause amblyopia (lazy eye) in young children because the brain tells the eyes to focus the same amount in each eye. If the eyes do not have the same refractive power (glasses prescription), one of the eyes will be blurry compared to the other. The brain is then not able to use the eyes together. The brain will pick the eye that has clearest vision or easier time focusing. The eye with the blurry vision will be ignored and will not develop a good connection to the brain. This leads to permanent poor vision in that eye, if it is not treated (amblyopia).

HOW DO I KNOW IF MY CHILD HAS ANISOMETROPIA?

Unless your child has a crossing or wandering eye, you will likely not know that one eye doesn't see well. There are no outward signs, as children most often have both eyes open, see very well using one eye, and do not notice that one eye sees better than the other. It is most often found by a school vision screen or by your pediatrician with vision testing. Sometimes, if the anisometropia is severe, your child's eye may drift in or out.

WHEN SHOULD MY CHILD BE CHECKED FOR LAZY EYE?

Ideally, we would want to find and start treating anisometropia by 3-4 years of age or during preschool (and even younger when possible). If you are

concerned, please talk to your pediatrician or pediatric ophthalmologist about screening your child for anisometropia.

WHAT IS THE TREATMENT?

The first step is fixing the difference between the eyes with glasses (or contact lenses in certain cases). This may be all the brain needs to start using both eyes together, but the glasses/contact(s) must be worn as instructed, usually all day. If the vision in the "lazy" eye has not improved enough with the glasses/contact(s) alone, you will need to force the brain to pay attention to the weak eye so that vision improves. This can be done by covering or patching the stronger eye, using a drop to blur the vision in the stronger eye, or by using filters over the glasses.

WILL THIS EVER GET BETTER?

A child's glasses prescription does change as he or she grows, but the difference between the two eyes may still be there even as they get older. In general, the treatment to improve the brain-eye connection works better if the child is treated at a younger age. The final vision depends greatly on a child's age when treatment is started, whether treatment is done as recommended, and how the glasses prescription changes over time. Some children may outgrow their need for glasses/contact(s), while many others will have a lifelong need for glasses.

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