Anisometropia

WHAT IS ANISOMETROPIA?

Anisometropia means that the two eyes have a different refractive power (glasses prescription), so there is unequal focus between the two eyes. This is often due to one eye having a slightly different shape or size from the other causing asymmetric curvature (astigmatism), asymmetric far-sightedness (hyperopia), or asymmetric 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, one of the eyes will be blurry relative to the other. The brain is then unable to use the eyes together. The brain will pick the eye with the clearest image or least refractive error. The eye with the blurry image 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.

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, function 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.

WHEN SHOULD MY CHILD BE CHECKED FOR LAZY EYE?

Ideally, we would want to identify 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 correcting 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 consistently as
instructed. If the vision in the “lazy” eye has not adequately improved with the glasses/contact(s) alone, you will need to force the brain to pay attention to this eye so that vision improves. This can be done by covering or patching the stronger eye, using a drop to blur the stronger eye, or by 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. In general, the treatment to improve the brain-eye connection is more successful if the child is treated at a younger age. The final visual result depends greatly on a child’s age, whether appropriate treatment is followed, and how the glasses prescription changes over time. Some children may outgrow their need for glasses/contact(s), while many will likely have an ongoing need for glasses.

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