

Anisometropia

What is Anisometropia?

Anisometropia means that the two eyes have a different refractive power, so there is unequal focus between the two eyes. This is often due to one eye having a slightly different shape from the other causing asymmetric *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 good vision.

How do I know if my child has Anisometropia?

Unless your child has a crossing eye you will likely not know there is a lazy eye. There are no outside signs as children function very well using one eye, and they rarely complain of symptoms. 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 age 3-4 years 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. This may be all the brain needs to start using both eyes together, but the glasses must be worn all the time. If the vision in the “lazy” eye has not adequately improved with the glasses alone, you will need to force the brain to use the other eye in order to maximally improve the vision. This can be done by covering or patching the good eye, using a drop to blur the good eye, or by filters over the glasses.

Will this ever get better?

Typically, the refractive power of the eyes will change as your child grows, but the eyes may continue to have an asymmetric refractive power and therefore always need glasses or contact(s) to reach and maintain their visual potential. The prognosis for treatment varies significantly based on the age of the child and if the appropriate treatment is followed. In general, treatment is more successful if the child is treated at a younger age.