ACCOMMODATIVE ESOTROPIA

What is Accommodative Esotropia?

Accommodative esotropia is a common type of eye crossing in kids. It happens when one eye turns inward toward the nose. This usually starts between ages 2 and 6. The word “accommodative” comes from "accommodation," which is how our eyes focus to see things clearly.

What Causes Accommodative Esotropia?

Kids who are more farsighted (hyperopic) than normal need to try harder to see clearly—especially for things that are up close. This extra focusing can cause either eye to turn in. If your child’s eyes seem crossed, they should be checked by an eye doctor who works with children (pediatric ophthalmologist and orthoptist).

Why is this a concern?

Crossed eyes in childhood can affect how normal vision develops. If one eye crosses more often than the other, amblyopia may develop. **Amblyopia** (sometimes called lazy eye) is reduced vision usually in one eye that can be treated by wearing an eye patch over the better seeing eye. Another negative side effect is reduced depth perception (stereopsis) or trouble seeing how far away things are. However, if treated early, vision and depth perception can develop normally.

Will all farsighted children have Accommodative Esotropia?

No. Most farsighted kids do not get esotropia. Only those who need to focus much harder are more likely to have their eyes cross. Two kids can have the same glasses prescription, but one may have straight eyes and the other may have crossing.

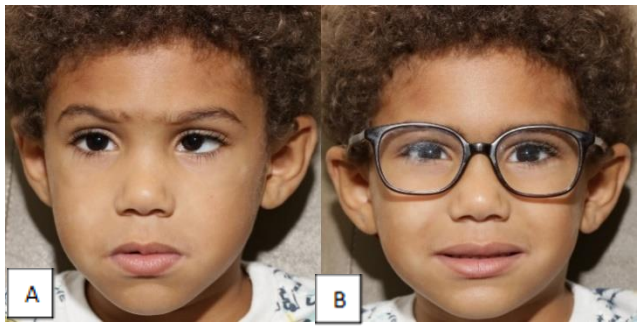
Treatment Option: Glasses or Contacts

Glasses, or contacts in older children, help the eyes focus without needing extra effort. This can stop the eyes from crossing. Kids with accommodative esotropia should wear glasses all the time when awake. If your child keeps taking them off, tell the eye doctor and orthoptist. They can help.

Is it normal for the eyes to continue crossing without the glasses?

Yes, in fact, the crossing seen without glasses on may be more noticeable than it was before the child started wearing glasses. What matters is that the eyes are straight when glasses are *on.*

3 Types of Accommodative Esotropia:

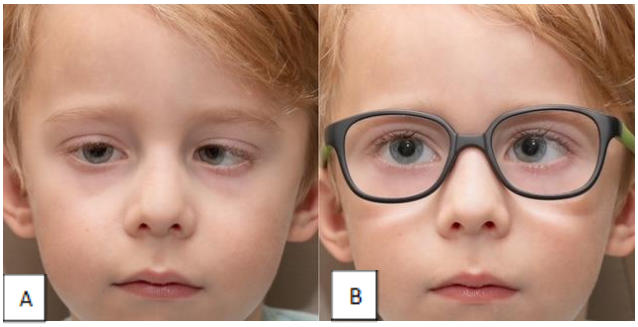


Fully Accommodative Esotropia (Refractive Esotropia) means the glasses prescription keeps the eyes straight. If vision is relatively equal in each eye, no further treatment is needed other than full-time glasses and follow up visits.

A. Eye crossing without glasses prescription.

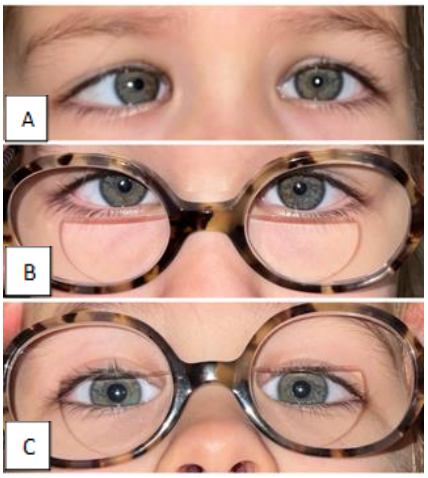
B. Straight eyes with full prescription.

Partially Accommodative Esotropia means the eye crossing improves but eyes are not straight with the glasses on. Therefore, vision and depth perception may not develop normally. Your orthoptist and pediatric ophthalmologist will re-evaluate the alignment on follow up clinic visits. These follow-up exams are important to monitor the vision in each eye and recommend patching or eye drops [atropine in one eye] if amblyopia has developed. They will also check if stronger glasses are needed. All of these findings will be discussed with you and additional treatment options may be considered.



A. Left eye crossing more without glasses.

B. Left eye still crossing with glasses while looking at distance *and* near.



Accommodative Esotropia with High AC/A In children with this type of Accommodative Esotropia, the eyes are straight when looking at a distance object when wearing glasses. However, the eyes continue to cross with near tasks such as reading. These children may benefit from making the lower reading portion of the eyeglasses a higher power by adding bifocals.

A. Right eye crossing with no glasses.

B. Right eye still crossing with glasses while looking at near

C. Straight eye alignment looking at near through lower bifocal portion

Treatment option: Surgery

Eye muscle surgery is suggested only if glasses don't fully straighten the eyes (partially accommodative esotropia). This surgery is usually done in childhood and does not eliminate the need for glasses, but rather reduces the amount of crossing that is "left-over" when the glasses are on. The eyes will likely continue to cross when the glasses are off.

Long Term Prospects

Some children may outgrow accommodative esotropia. This usually happens during grade school and adolescent years as a child becomes less farsighted. It is difficult to predict early in childhood if a given child will outgrow their need for glasses and have straight eye alignment without glasses.

Children who do not outgrow their need for glasses may be eligible for refractive surgery later in life. LASIK is only FDA-approved in individuals 18 years of age or older. Whether a child can have refractive surgery should be decided individually with input from a refractive surgeon and a pediatric ophthalmologist.

*Handout has been adapted from the AAPOS website.