

STRABISMUS

Esotropia

"Esotropia" is a term used to describe inward turning of the eyes. There are different types of Esotropia.

Accommodative Esotropia:

- Esotropia completely resolves with glasses.
- When the glasses are off, eyes will continue to turn inward.
- Strabismus surgery is NOT indicated as long as the eyes remain straight with the glasses in place.
- In some cases, esotropia is greater at near (close-up work, such as reading) than at distance. This subtype is referred to as Accommodative Esotropia with High AC/A Ratio and is managed with special bifocal glasses with the top of the bifocal segment to bisect (cross the middle of) each pupil.

Partially Accommodative Esotropia:

- Esotropia is partially but not completely improved with glasses.
- When the glasses are off, eyes turn inward, more than WITH the glasses in place.
- Strabismus surgery is indicated to achieve straight eyes with the glasses in place.
 - After the surgery, glasses will need to be continued, as the inward eye turn will persist when the glasses are off, as anticipated.
 - Optimal timing of the strabismus surgery is after the management of amblyopia if present.
 - As a general rule, early intervention to achieve straight eyes is optimal.

Non-Accommodative Esotropia:

- Esotropia is NOT improved with glasses.
- Strabismus surgery is indicated to achieve straight eyes.
 - Optimal timing of the strabismus surgery is after the management of amblyopia if present.
 - As a general rule, early intervention to achieve straight eyes is optimal.

Use of the Glasses for Accommodative and Partially Accommodative Esotropia

- When the glasses are tried initially, vision may be blurred.
- However, with persistent full-time wear of the glasses, blurred vision will resolve in time.
- Looking over the glasses or sporadic wear of the glasses need to be avoided, as the "blurred vision" will not improve until the glasses are worn effectively (looking through rather than over the glasses and worn full time).
- When first trialling the glasses, esotropia may appear to have worsened particularly when the glasses are off; this is generally not concerning and is a natural part of this type of esotropia.



Exotropia

"Exotropia" is a term used to describe outward turning of the eyes, which may be well or poorly controlled and may be associated with the inability to bring the eyes inward to focus at near.

Well-controlled Exotropia

• If the exotropia is intermittent with the eyes turning out less than about 50% of the awake hours and if the eyes can generally straighten at will, conservative management with continued monitoring is advised.

Poorly-controlled Exotropia

- If the exotropia is poorly controlled with the eyes turning out more than 50% of the awake hours or constantly turned out and unable to straighten even when alert and not fatigued, intervention would be considered, particularly if symptomatic of "double vision".
 - Glasses with mild minus correction to the extent that visual acuity is not compromised.
 - Strabismus surgery would be considered if the conservative approach fails.

Convergence Insufficiency

- Exotropia is often associated with the inability for the eyes to converge toward the nose when focusing up close, which can hinder near work, such as reading.
- Simple exercise (Pencil Push Up Exercise) can facilitate convergence and thereby improve the control of the exotropia.
 - Focus on a near target (e.g., sticker) with both eyes, slowly draw the target toward the nose while maintaining focus until the eyes lose focus and drift apart; repeat this process 10 times per session, as often as possible, daily.



