

Inclusion Criteria: All children with childhood onset esotropia, ages 6 months to 13 years old

Exclusion Criteria: Special cases of esotropia such as cranial nerve palsy, Duane Syndrome, craniofacial abnormalities, congenital fibrosis, myasthenia gravis, thyroid related

Referral Criteria

Outpatient Referral by PCP or CHOC Specialist for Esotropia

- **Urgent referral, call 714-509-4475, if:**
 - Acute onset of esotropia
 - Any abnormal red reflex noted
 - Significantly decreased vision or tracking in either eye
- **Routine referral if:**
 - Gradual onset of strabismus, without any other neurological symptoms
 - Please attach any vision screening results if applicable
 - If request for referral is coming from an outside optometrist, therapist, school nurse, or any other source, please attach all supporting documentation that was provided.

Inpatient Referral

- For any inpatient who is noted to have pre-existing esotropia, that is not the reason for the admission, can be referred for outpatient ophthalmology evaluation.

Ophthalmology Assessment

Comprehensive Eye Exam, including the following:

- Sensorimotor evaluation
- Dilated fundus Exam
- Cycloplegic Refraction

Interventions

- Address any ocular pathology
- Treat any refractive error with glasses
- Treat amblyopia
- Consider surgical correction after all of the above are optimized.

Surgical Recommendations

- Strabismus surgery indicated for esotropia measuring greater than 10-12 prism diopters, with best spectacle correction in place.
- Age over 6 months old
- Patients should have potential for achieving improvement in vision, binocularity, and depth perception.

Other Surgical Recommendations

- Surgery can be considered to treat associated diplopia and/or head tilt
- Consider surgery to address Social/self-esteem concerns
- Consider ocular pathology and presence of high myopia to direct surgical plan

Surgical Expectations

- Strabismus surgery is usually an outpatient surgery in healthy children. Patient will be discharged from the PACU after vitals are stable.
- One or both eyes may need surgery, depending on the patient.

Post Operative Expectations and Care

- Expect to see eye redness and blood tinged tears.
- Expect to have a little double vision in the first week after surgery.
- Use antibiotic/steroid combination ointment or drops for 2 weeks. Typically prescribe Neomycin-polymyxin B- dexamethasone (Maxitrol) or Tobramycin-dexamethasone (Tobradex), 4x/day in the operated eye for 2 weeks. Alterations in regimen made on a case by case basis.
- Pain control with Ibuprofen 10mg/kg/dose po q6hours, or Acetaminophen 10mg/kg/dose po q6 hours. Take on schedule for 3 days.
- No water in the eyes for 2 weeks. Can clean the crusting with clean gauze and saline.
- Avoid touching/rubbing eyes, Keep hair out of the eyes, for 2 weeks.
- No running, sports, outdoor recess, physical education, physical therapy, playing wind instruments, or other activities that cause exertion for 2 weeks after surgery.
- Wear the glasses as usual after surgery.
- All eye patching will be on hold immediately after the surgery. We will instruct the patient when to resume.
- Typical follow up intervals at 1 week, 1 month, then 3 months post operatively. Further follow up to be determined by patients eye alignment and amblyopia.

When to Call the Surgeon after Surgery

- Developing eyelid swelling, or increased eye discharge or pain.
- Decreased vision
- Sudden change in appearance of strabismus

Call **714-509-4490**, for questions and concerns, daytime and after hours.

When to go to PCP or Emergency Department after surgery

- Fever over 100.4
- Severe nausea or vomiting

Discharge Criteria, from Pediatric Ophthalmology/ Surgical Ophthalmology

- After amblyopia is resolved or plateaued
- Less than 8 prism diopters of residual esotropia or exotropia
- Will transition to CHOC pediatric optometrists going forward

Patient Education

- There is high incidence of needing further strabismus surgery in the future
- Compliance with glasses and amblyopia treatment will still be needed after surgery to maintain good visual outcomes
- **KidsHealth**
 - Strabismus for Parents
 - Amblyopia for Parents
- **Lexicomp**
 - Eye Muscle Surgery
 - Eye Muscle Surgery Discharge Instructions
 - Strabismus Discharge Instructions

Esotropia Care Guideline References

The Pediatric Ophthalmology/Strabismus Preferred Practice Pattern Panel. (2022). Esotropia and Exotropia Preferred Practice Pattern. p180-p221. American Academy of Ophthalmology. Retrieved July 2, 2024, from <https://www.aao.org/education/preferred-practice-pattern/esotropia-exotropia-ppp> (Level V)