

Exotropia

Exotropia refers to an outward deviation of the eye(s). Although exotropia commonly begins around age 2 to 4 years, it can appear at any age.



V-Pattern Exotropia with Moderate Bilateral Inferior Oblique Overaction

Signs of Exotropia

A noticeable outward deviation of one or the other eye is usually the primary sign. Initially, this form of strabismus may only be seen when the child is tired, ill, or daydreaming. The deviation is more often noted when the child looks in the distance than at near. A child with exotropia may close, squint, or rub one eye (usually the deviating eye), particularly in bright, sunny environments. Few children complain of double vision. This condition does not typically self correct.

Treatment

Eye muscle surgery to address outward turning of the eye(s) is generally recommended if one or more of the following criteria are present:

- If the exotropia occurs more than 50% of the day.
- If the frequency of the exotropia is definitely increasing over time although it is not yet apparent for 50% of each day.
- If there is a significant exotropia when the child intently views objects at near.
- If there is evidence that the child is losing binocular vision. This refers to the brain's ability to use both eyes together as a single unit. Binocular vision provides optimal depth perception.

If none of these criteria are met, observation with or without eyeglasses is reasonable. Adult patients may consider prisms, stick on (Fresnel) or ground in, if the amount of turning is small.

What about eye patches and glasses?

Individuals with intermittent exotropia often do not have amblyopia, although it is not uncommon for children with other forms of strabismus to have amblyopia or decreased best-corrected vision in one or even both eyes. If significant amblyopia is present in one eye, Dr. Shin may recommend applying a patch over the stronger eye or instilling atropine drops on the stronger eye to force the child to use and strengthen the eye with amblyopia. However, if the child does not have amblyopia, then patching to eliminate a suppression scotoma (ignored part of the visual field) is sometimes tried for intermittent exotropia, although not in young children as it can induce amblyopia. If the child needs eyeglasses, they will be prescribed as well. If the patient is myopic, glasses sometimes help control the outward turning because the lenses stimulate accommodation.

Eye muscle surgery is generally not recommended until the vision in each eye is maximized, if necessary, with either patching or atropine drop therapy, with or without eyeglasses. In some children, the exotropia improves with these measures alone, so an operation becomes unnecessary.

What about eye muscle exercises?

Convergence insufficiency is a type of exotropia which may respond to eye muscle exercises. This disorder is characterized by a deficiency of the eyes to work in unison when the patient attempts to use the eyes at near (e.g. reading). Instead of the eyes converging together on the near object, one of the eyes deviates outward.

Except for treatment of convergence insufficiency, eye muscle exercises have not proven to be an effective form of strabismus therapy. In addition, eye exercises are difficult for young children to comply with.

Will my child outgrow this problem?

If the exotropia is mild and none of the four treatment criteria listed above are applicable, then there is a small chance that the exotropia will diminish with time. However, if the exotropia is significant and meets any of the listed four criteria, it is very unlikely that the exotropia will improve without surgery.