



Strabismus

Strabismus refers to misaligned eyes. **Esotropia** (“crossed” eyes) occurs when the eyes turn inward.

Exotropia (“wall-eye”) occurs when the eyes turn outward. When one eye is higher than the other, it is called **hypertropia** (for the higher eye) or **hypotropia** (for the lower eye). Strabismus can be subtle or obvious, and can occur occasionally or constantly. It can affect one eye or shift between the eyes.

Strabismus usually begins in infancy or childhood. Some toddlers have **accommodative esotropia**. Their eyes cross because they need glasses for farsightedness. But most cases of strabismus do not have a well-understood cause. It seems to develop because the eye muscles are uncoordinated and do not move the eyes together. **Acquired strabismus** can occasionally occur because of a problem in the brain, an injury to the eye socket, or thyroid eye disease.

When young children develop strabismus, they typically have mild symptoms. They may hold their heads to one side if they can use their eyes together in that position. Or, they may close or cover one eye when it deviates, especially at first. Adults, on the other hand, have more symptoms when they develop strabismus. They have double vision (see a second image) and may lose depth perception. At all ages, strabismus is disturbing. Studies show school children with significant strabismus have self-image problems.

Amblyopia (“lazy eye”) is closely related to strabismus. Children learn to suppress double vision so effectively that the deviating eye gradually loses vision. It may be necessary to patch the good eye and wear glasses before treating the strabismus. Amblyopia does not occur when alternate eyes deviate, and adults do not develop amblyopia.

Strabismus is often treated by surgically adjusting the tension on the eye muscles. The goal of surgery is to get the eyes close enough to perfectly straight that it is hard to see any residual deviation. Surgery usually improves the conditions though the results are rarely perfect. Results are usually better in young children. Surgery can be done with local anesthesia in some adults, but requires general anesthesia in children, usually as an outpatient. Prisms and Botox injections of the eye muscles are alternatives to surgery in some cases. Eye exercises are rarely effective.