Strabismus

Strabismus is a condition in which the eyes are not lined up (aligned) normally. The eyes point in different directions: either inward ("crossed eyes") or outward ("walleye"). Treatment usually consists of eye patching or special glasses to train the eyes to work together. Visits to an eye doctor (ophthalmologist) are needed to diagnose and treat this condition. Your child also may need eye surgery.

What is strabismus?

Strabismus, sometimes called "lazy eye," is a common vision problem in children. One eye is not aligned with the other, so they don't move together properly. The eyes may point inward (crossed eyes, or esotropia) or outward (walleye, or exotropia). Strabismus doesn't always cause obvious vision problems, but treatment is needed to protect vision in the weaker eye.

A visit to an eye doctor (ophthalmologist) is needed to determine the type of strabismus and the best treatment. Most often, treatment consists of an eye patch or special glasses to help train the weaker eye to work normally. Some children with strabismus need surgery.

What does it look like?

- Your child's eyes do not line up or move together properly. This may be noticeable all the time or only when your child looks in one direction.
- The affected eye may turn inward (cross-eyed) or outward (walleyed). In some children, the eyes have difficulty moving up and down together, rather than side to side.
- Your child may or may not have vision problems, such as double vision. Vision is usually quite a bit weaker in one eye. This may cause problems with depth perception and judging distances, which require accurate vision in both eyes.
- Occasional turning in or turning out of one eye is normal in babies during the first 3 to 4 months.

What causes strabismus?

- For various reasons, your child has an imbalance in the muscles that move the eyes or in their ability to focus. Eventually, the brain "learns" to ignore the vision in the weaker eye. If this happens, the vision in that eye will grow weaker and weaker over time (called *amblyopia*).
- Most often, the cause of strabismus is unknown. If the problem is discovered at birth or before 6 months of

age, it may be called "congenital" or "infantile" strabismus.

 Less often, strabismus is caused by specific injuries or diseases affecting the eye muscles or the nerves that move them.

What are some possible complications of strabismus?

- Permanent loss of vision in the weaker eye. Prompt diagnosis and treatment will preserve your child's vision as much as possible.
- Certain types of strabismus are difficult to eliminate completely. Your child may require long-term treatment, or the problem may return after treatment.

What puts your child at risk of strabismus?

- If you or others in your family have had strabismus, your child may be at higher risk.
- Certain genetic diseases, including Down's syndrome.
- Certain types of brain or nerve injuries, including cerebral palsy.
- Certain eye diseases, including retinopathy of prematurity; or tumors, including retinoblastoma.

Can strabismus be prevented?

There is usually no way to prevent strabismus. Early treatment gives your child the best chance for normal vision.

How is strabismus diagnosed?

Proper treatment of strabismus requires tests and evaluation to determine what type of strabismus your child has. An eye doctor (ophthalmologist) will coordinate your child's care. The tests are not painful. The doctor will likely have to put drops in your child's eyes to perform a complete examination.

There are several types of strabismus:

Pseudostrabismus. Some infants whose eyes don't seem
to work together properly don't really have strabismus
at all. This pseudostrabismus ("false" strabismus) is a
misleading appearance that will eventually go away as
your baby's face continues to grow and develop. However, it's important to remember that your child could still
develop true strabismus later in life. If the cross-eyed
appearance doesn't go away within a few months, your
child should be checked again.

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- Esotropia (crossed eyes). Your child may be born with crossed eyes but more often the problem becomes apparent during the first 6 months. This is called "congenital" or "infantile" esotropia. Other children develop crossed eyes a little later on, usually around age 2 or 3. This is called "accommodative" esotropia.
- Exotropia (walleye). Walleye (eyes pointing in opposite directions) may be noticeable all the time or just some of the time. It may be more noticeable when your child is tired or sick, or when he or she is focusing on something at a distance. The problem may not develop until your child is 4 to 6 years old.
- Paralytic strabismus and other special types. Some children with strabismus have damage to the nerves that move the eye muscles. Your child may be born with these problems (congenital), or they may result from some injury or illness developing later on. Children with these types of problems are more likely to need eye muscle surgery.

How is strabismus treated?

- Depending on the cause of strabismus, treatment may consist of using patches, glasses, and/or eye muscle surgery.
- For congenital esotropia, patching of the good eye is often done to improve the function of the bad eye. Surgery to correct the problem is done after patching. Surgery may be needed if glasses or patching don't work, or if your child still has some leftover strabismus after this treatment.
- The exact treatment depends on the ophthalmologist's evaluation. The earlier you notice the problem with eye alignment, the earlier treatment can begin and the better the chance of good results.

When should I call your office?

Most children with strabismus make regular visits to their ophthalmologist. Call your ophthalmologist if your child's strabismus symptoms don't improve with treatment or if they return after treatment.