American Academy of Ophthalmology
The Eye M.D. Association
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pseudostrabismus
a closer look

WHAT IS PSEUDOSTRABISMUS?

Pseudostrabismus is the false appearance of misaligned eyes. When eyes are truly misaligned, the condition is called **strabismus**. In strabismus, the eyes can drift inward, outward, upward or downward.

Esotropia is the name for the condition where the eyes deviate inward. In **pseudoesotropia**, the eyes appear to be crossed but are actually straight. This common condition in infants and young children is generally due to facial structures. The wide bridge of the nose and small folds of eyelid skin on the nasal side of the eye contribute to this appearance by covering the "white" of the eye. This especially becomes apparent when the infant looks to the right or the left. Then, nearly all of the white is covered, and the eyes appear crossed. As the infant's facial structures mature, this appearance of crossing will improve and often disappear.

Exotropia is the name for the condition where the eyes deviate outward. In **pseudoexotropia**, the eyes appear to be wandering out but are actually straight. While less common than pseudoesotropia, it also is often due to facial structures. Children with widely set eyes can appear as if their eyes are drifting out.

It is common for parents to be concerned about their child's visual development, especially when they notice what appears to be crossed eyes. Misaligned eyes are a true cause for concern. If left untreated, strabismus can quickly lead to poor visual development in one eye. Unlike pseudostrabismus, a child does not outgrow true crossing of the eyes. He or she will need ophthalmological treatment to straighten the eyes and allow for normal vision to develop.

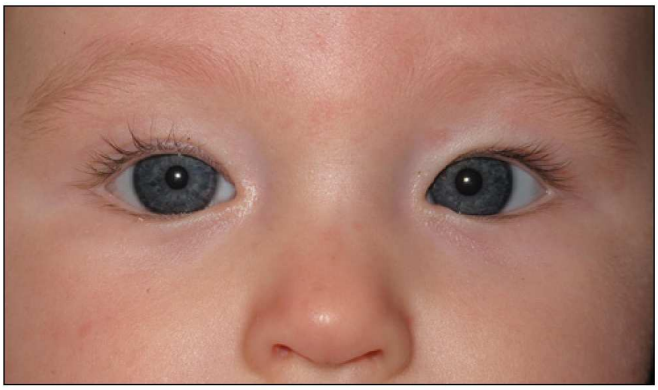
An infant's eyes may drift in or out at times, but this small variable alignment is perfectly normal during the first few months. When a baby begins focusing on the environment, at about two to three months of age, the eyes should be straight most or all of the time.

HOW CAN YOU TELL THE DIFFERENCE?

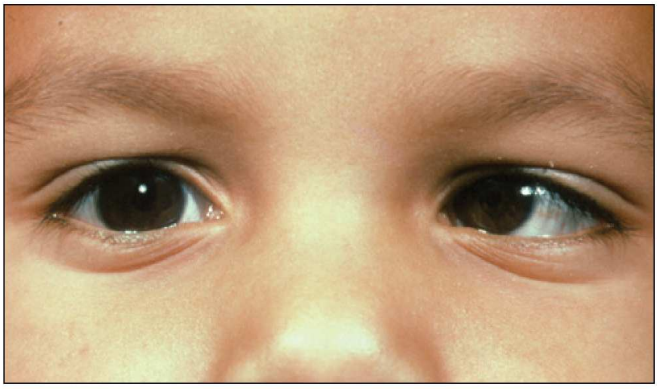
To tell the difference between strabismus and pseudostrabismus, look at a flash photo when the child is looking at the camera and note the position of the light reflection.

If both eyes are properly aligned, the light reflection will be in the center of each pupil, or displaced slightly toward the nose in each eye. If the child has true strabismus and the eyes are not aligned properly, the reflection will appear in a different location in one eye.

Because the light is not affected by the width of the nose or folds of the eyelid skin, a child with pseudostrabismus will have a normal reflection. Parents of a child with strabismus may first notice an abnormal light reflection in flash photos of the child.



Pseudostrabismus. Although the eyes appear misaligned in these photographs, the light reflection is symmetrical in both eyes.



True strabismus. Notice the asymmetrical light reflection.

DOES YOUR CHILD HAVE STRABISMUS?

Ask your ophthalmologist (Eye M.D.) to examine the child if you have any concerns as to whether his or her eyes are straight. Strabismus should not be ignored. A prompt examination may help avoid vision loss. Occasionally, strabismus can be caused by a:

- Cataract;
- Tumor in the eye;
- Neurological problem.

These conditions may require urgent medical attention. The vast majority of children with strabismus, however, have none of these problems.

When a child's eyes are actually crossed, he or she will use only one eye at a time to avoid seeing double. The unused or crossed eye may not develop good vision and may become **amblyopic** ("lazy"). To prevent this condition, the child must be made to use the misaligned eye by patching or blurring the good eye. If amblyopia is not treated early in childhood, poor vision persists throughout life.

In some cases, true strabismus may be difficult to detect. The eye may deviate intermittently, or only slightly, and more than one examination may be needed to detect the problem. Over time, pseudostrabismus gets better, whereas true strabismus may get worse.

Older children can be tested for poor vision and amblyopia by using eye charts.

The goals of treating strabismus are:

- Good visual development in both eyes;
- Straight eyes;
- Eyes that work together;
- Detection and treatment of any underlying eye problems.

If you have any questions, please contact your pediatrician, family doctor or ophthalmologist.

This handout was written in conjunction with the Association for Pediatric Ophthalmology and Strabismus, an organization of pediatric ophthalmologists dedicated to prevention and treatment of eye problems in children and the treatment of strabismus in people of all ages.

NOTES

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