

Treating anisometropic amblyopia

A guide for parents on why treatment cannot wait, why glasses come first, and what to expect.



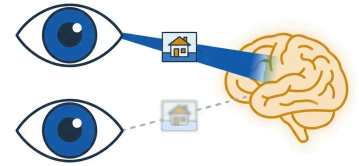
PATIENT EDUCATION

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1. What is happening

Your child's eyes have significantly different prescriptions, a condition called anisometropia. The eye with the stronger prescription has been sending the brain a blurred image. During childhood the brain learns to rely on the clearer eye (top, at right) and suppress the blurred one (bottom). The result is amblyopia, often called lazy eye, which is reduced vision that glasses do not correct right away. The eye itself is healthy. The deficit lies in how the brain processes that eye's signal.



Why timing matters

Amblyopia does not resolve on its own. Vision stays reduced for as long as it goes untreated. The brain's visual system is most adaptable in early childhood, and that adaptability fades between roughly ages 6 and 10. In pooled trials by the Pediatric Eye Disease Investigator Group (PEDIG), children treated before age 7 responded significantly better than children ages 7 to 12. About half of that older group still improved, but most were left with reduced vision in that eye. **Vision that is not recovered during this window is usually lost for good**, and glasses or contact lenses alone will not bring it back later. People with amblyopia also carry nearly three times the risk of becoming visually impaired later in life, because they depend on one good eye. Starting now and staying consistent gives your child the best chance at normal vision in both eyes.

2. Why glasses come first

Glasses give the weaker eye a focused image, and that alone can restore much of its vision. In a PEDIG study of 84 children ages 3 to 6, glasses alone improved vision by two or more lines on the eye chart in 77% and resolved the amblyopia in 27%. Improvement continued for up to 30 weeks. So we recheck vision every few weeks and add other treatment only once that improvement levels off. In the PEDIG trial that tested patching, children had first worn glasses for at least 16 weeks. Glasses stay on during all waking hours through every later step.

3. If glasses alone are not enough

Patching

An adhesive patch, worn under the glasses, covers the stronger eye for part of each day, so the brain must use the weaker eye. In PEDIG trials, 2 hours a day matched 6 hours for moderate amblyopia, and 6 hours matched full-time patching for severe amblyopia. Your doctor will set the hours.

Atropine drops

A drop of atropine blurs the stronger eye's near vision, so the weaker eye takes over for close work. Weekend-only drops worked as well as daily drops. Blurred near vision and light sensitivity in that eye are expected while drops are in use and for up to 2 weeks after the last one. Your doctor will set the schedule.

Digital therapy

A headset or tablet shows each eye a different image so the eyes work together. Two prescription devices are FDA-cleared, Luminopia (ages 4 to 12) and CureSight (ages 4 to 8), both used with glasses on. In PEDIG trials of a tablet game, patching performed as well as the game or better.

Patching or drops? The two work about as well as each other, both in young children and at ages 7 to 12. If one is not working, we switch to the other.

4. What to expect

Today

Full-time glasses.

First 4 to 7 months

Vision checks every few weeks. Most improvement from glasses occurs in this period.

If the eye still lags

Patching or drops are added. Most of that improvement comes in the first 4 months, though treatment often runs 6 months or longer.

Afterward

Treatment is tapered, and we monitor for at least a year. About 1 in 4 children regress and need a brief return to treatment. In PEDIG follow-up, gains held at ages 10 and 15.

5. What you can do

- **Treat every day as counting.** Glasses, patching, and drops work only when used as prescribed, and the window for them is limited.
- Pair patch time with close-up activities such as drawing, reading, or puzzles.
- Keep every follow-up visit, even when vision seems fine, because regression is common. Do not stop patching abruptly on your own. That raises the risk of regression.
- Call us if your child has a rapid heartbeat, a very dry mouth, or confusion after drops.



General information only. Your child's eye doctor sets the treatment plan. Figures come from PEDIG clinical trials. Illustrations were generated for this sheet. Prepared 2026-10-01 by EyeKnowOD.com.