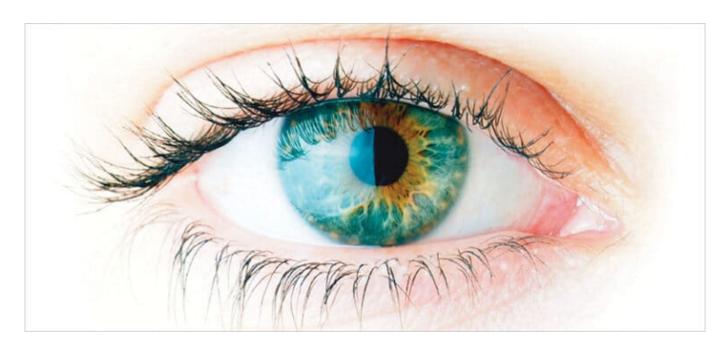
4 ways to manage double vision



Solutions to help manage this common symptom of MS.

by Fareeha Molvi

Double vision, a common MS symptom, is caused by demyelinating lesions on the brainstem, the area of the brain responsible for controlling eye movements. These lesions prevent the eyes from properly receiving messages from the nerves. The neural misfires result in the misalignment of images, or double vision.

In August 2009, Debbie Ned began seeing double. A month later, she was diagnosed with multiple sclerosis. For the next seven months, blurry, double vision affected nearly every facet of her life.

Ned, of Nampa, Idaho, could not look at the computer screen for long before a headache set in. "I felt like a bobblehead with my insides rattling around inside my head," she says. She began to lose her balance and at times could not walk in a straight line. Unable to read or drive her daughter to school activities, Ned, then 46, felt her life change in the blink of an eye.

Double vision occurs when "the brain is not able to take the images from both eyes and fuse them into one," says Dr. Elliot Frohman, professor of neurology and ophthalmology, and director of the MS Program and Clinical Center for MS at the University of Texas Southwestern Medical Center.

In most cases, double vision associated with MS occurs as the result of an exacerbation, or flare-up. Like most such symptoms, it lasts anywhere from a few weeks to a few months.

Other factors such as fatigue, stress or a temporary rise in body temperature can trigger brief episodes of double vision. In those instances, the person's vision usually resolves quickly. When double vision is due to an exacerbation, however, several treatment methods can be used to help correct it.

1. Patching

For some people, wearing a patch over one eye or frosted tape over one lens of their glasses helps block visual input from one eye, thereby achieving single vision until the exacerbation is over. There is no danger in developing a "lazy eye" from patching. Dr. Thomas Hedges, director of neuro-ophthalmology at the New England Eye Center at Tufts University in Boston, says, "The muscles in both eyes are always stimulated together so they work in tandem whether one eye is covered or not." People can wear the patch for as long as their doctor prescribes.

2. Prisms

If patching is not effective, prism lenses may be incorporated into eyeglasses to redirect the way light enters the eye. An ophthalmologist adjusts the prisms for each individual to bring the images closer together. Over time, the eye muscles learn to fuse the images into one.

Prisms were effective for Ned, who after three months of wearing them, has not had any recurrences of double vision. However, prisms do have some drawbacks: They can take considerable time to get the fit just right, and the extra weight of the lens can feel heavy.

3. Steroids

When patching and prisms don't work, doctors may prescribe steroids. Their antiinflammatory action sometimes helps resolve double vision brought on by an exacerbation, which really is an inflammatory episode of demyelination.

Steroids may be prescribed alone, with other medications or used in combination with more conservative methods, such as patching and prisms.

4. Surgery

In rare instances when MS-related double vision persists despite these treatments, surgery may be considered. That was the case for Judie Carlson of Cape Coral, Fla., who lived with double vision for more than 30 years. After trying steroids and patching with no success, Carlson, 74, began to wear prism lenses. Unlike most people who find their double vision abating after a few months of treatment, Carlson had to continue wearing the lenses to achieve single vision—until she became aware of a surgical option.

In September 2012, a neuro-ophthalmic surgeon shortened the weaker muscle in Carlson's left eye while loosening the opposing, stronger muscle, allowing the eyeball to move freely in all directions and to align better with the right eye. Though her surgeon cautioned her that there was no guarantee that the procedure would restore her single vision completely, she was able to see normally the day after her procedure, and she has not had to wear prisms

since.

Surgery is not right for everyone. "When the patient is a good candidate, the success rate is high," Dr. Hedges says. But specific ocular characteristics, such as the direction in which an individual's eyes deviates, and changes in eye patterns over time (as well as other health factors) will determine whether surgery is a good option. In addition, general anesthesia is used, which carries its own risks. Those considering surgery should wait at least a year to see if their double vision stabilizes before deciding on it with their ophthalmologist or ophthalmic surgeon, Dr. Frohman recommends.

More ways to manage

People with double vision can also make lifestyle adjustments to reduce demand on the eyes, says Evelyn Render-Katz, OTR/L, an occupational therapist at the Weigel Williamson Center for Visual Rehabilitation at the University of Nebraska Medical Center in Omaha.

Try increasing the font size when reading on a computer or tablet. Improved lighting and decreased glare can help, too. Render-Katz also suggests limiting visual demands by listening to audio books and using tactile markings in place of text to mark buttons on appliances. A raised dot might indicate "on" and two raised dots could denote "off."

An occupational therapist can provide further advice on home aids and techniques to manage double vision. Call an MS Navigator at 1-800-344-4867 for a referral in your area.

Fareeha Molvi is a Chicago-based writer.

Find tactile marking dots, pens and kits online at <u>maxiaids.com</u> and <u>abledata.com</u>.