

Finally, it can take one to three months for your vision to stabilize. In general, the greater your pre-procedure prescription, the longer it will take to stabilize. You should not be concerned if in the days following your surgery, you do not have the reading ability that you thought you would. This is part of the normal healing process.

Please take the time to fully consider your options, as the decision to have monovision or full distance correction is entirely personal preference. Remember to take into account your lifestyle, working environment, and leisure activities when making this decision.



N. Timothy Peters, MD



Lauren McLoughlin, OD



Christopher Turner, OD

# Monovision, Mini-Monovision and Presbyopia

Important information  
for patients over 40  
who are considering  
LASIK procedures



**Clear Advantage Vision Correction Center**

**155 Borthwick Avenue, Suite 200 East**

**Portsmouth, NH 03801**

**Tel: 603-501-5000 or 1-866-302-5327**

**Fax: 603-501-5001**

**[www.ClearAdvantageLaser.com](http://www.ClearAdvantageLaser.com)**



## Monovision, Mini-Monovision and Presbyopia

It is important that you understand that refractive surgery **DOES NOT PREVENT** the age-related loss of the eye's ability to focus on near objects. This process is called **PRESBYOPIA** (literally- "old vision"). If you are over 40 and have both your eyes fully corrected for distance vision, you will eventually become more and more dependent upon reading glasses for near vision. As an alternative to reading glasses, you may elect to leave one eye somewhat nearsighted; an outcome called **MONOVISION**.

This tutorial is designed to provide the background information needed for a person to decide whether they should consider **MONOVISION** laser correction. Of course, careful discussion with one's doctor is extremely important when considering this treatment. If you are approaching or are over the age of 40, please discuss **MONOVISION** with your doctor so that an appropriate surgical plan can be made.

### Vision Correction Surgery for People with Presbyopia

If you are nearsighted, over the age of 40, and accustomed to removing your glasses for close work, you need to give extra thought to vision correction surgery. As the lens inside the eye begins to enlarge and crystallize, it becomes harder and harder for it to change shape to focus on near objects. Therefore, one can either view objects clearly up close **OR** far away (but not both). People over 40-45 usually require glasses for near and intermediate tasks if the goal of their surgery is to focus both eyes for distance objects.

One strategy that allows presbyopic patients to retain some reading vision is to correct one eye for distance and leave the other slightly nearsighted. This technique is called **MONOVISION**. If you are over 40 and a contact lens wearer, your eye care provider may have already demonstrated **MONOVISION** to you by giving you one contact lens that does not fully correct your distance vision. The majority of those patients who give monovision an adequate trial adapt

to it successfully. Those patients who do not use monovision will simply wear reading glasses for near and intermediate work. It may take 3 to 4 weeks for patients who are first exposed to **MONOVISION** to get used to it, however some can never adapt. Therefore, patients considering **MONOVISION** for laser vision correction should first attempt to simulate it with contact lenses. Patients, who tolerate **MONOVISION**, can then consider duplicating this correction with laser treatment. If you typically look through a camera with your right eye (dominant eye), for example, then the left (non-dominant eye) is routinely used as the monovision or near eye.

You should consider that presbyopia is a progressive condition that starts around the age of 40. Regardless of the previous need for glasses in younger years, everyone will need some form of near and intermediate correction between 40 – 70 years old. In addition, the power necessary to maintain near vision clarity will increase with age (due to the eye's natural lens aging). So while at age 45 you may require a +1.50 reading prescription power, by the age of 55 a power of +2.25 may be necessary. The +1.50 power that gave you good near clarity at age 45 may now, at age 55, be more appropriate for intermediate or mid-range vision. Consequently, the amount of monovision correction with LASIK surgery will change as the eye naturally ages. However there is still great benefit to having some amount of undercorrection and retaining good mid-range vision in later years. Consider that many of the things that you do, like looking at your dash board, seeing the food on your plate, working on a computer, reading a menu in a restaurant or a label on a can are all mid-range tasks.

Another option for patients who cannot adapt to **MONOVISION** is what we call **MINI-MONOVISION**. Instead of leaving one eye undercorrected to the full correction needed to be able to see close objects sharply, only a slight undercorrection is left (about  $-0.50$  to  $-0.75D$ ). Most patients will tolerate the small discrepancy between eyes without noticing it. This is easily demonstrated at the time of your pre-operative evaluation.