

# KAMRA INLAY READING VISION CORRECTION

## *Comanagement Guidelines*

### WHAT IS THE KAMRA INLAY?

- It is a film-like miniature ring that can help emmetropic presbyopes regain near vision.
- The inlay is placed in the non-dominant eye, 200 to 250 microns below the corneal surface, within a femtosecond laser pocket.
- The treated eye is used for reading and near focus, but also retains good distance vision.
- The inlay is 3.8 mm in diameter with a 1.6 mm opening in the center.
- Only one-tenth the thickness of a human hair, as thin as a red blood cell, the inlay is lighter than a grain of salt.
- It is comprised of a proven biocompatible polyvinylidene fluoride (PVDF) that is frequently used in a wide variety of eye and other medical implants.
- 8400 tiny holes in the inlay allow the normal flow and passage of corneal nutrition.
- Developed by AcuFocus in Irvine, CA, the KAMRA inlay has been carefully tested and implanted safely in tens of thousands of eyes.
- The KAMRA inlay is commercially available in 50 countries.
- It has been used in Canada since 2012 and received U.S. FDA approval in 2015.
- An international study found that 95% of patients are satisfied with their new vision.
- If patients are not satisfied the inlay can be removed. The global removal rate is less than 2%.

### HOW DOES IT WORK?

- The inlay creates a pinhole effect in the treated eye that extends the natural range of vision.
- Working on the same principle as a camera's small lens aperture setting that increases depth

of focus, the inlay brings near objects into sharper focus while maintaining clear distance vision.

### CANDIDATES

- Age  $\geq$  45 years
- Spherical equivalent between -0.75 and -1.00 with 0.75 D or less of astigmatism in the non-dominant eye (or willing to achieve this with laser vision correction)
- Stable refraction for minimum of 1 year
- Patients who have previously had LASIK, PRK or cataract surgery
- Pachymetry  $>$  500 microns
- Mesopic pupil size  $\leq$  6.0 mm
- Dislike reading glasses, consider loss of near vision a disability, cosmetic or lifestyle motivated
- Easygoing and adaptable personality
- Willing to participate in the recovery process
- Understand additional magnification may be needed for tiny print, to see in dim light, or to perform near tasks for an extended period of time

### CONTRAINDICATIONS

- Previous corneal surgery, other than laser vision correction
- Any ocular or systemic disease that is a contraindication for corneal refractive procedures (i.e. keratoconus, poorly managed dry eye, cataracts, macular degeneration, corneal dystrophy or degeneration, amblyopia, strabismus, autoimmune disease)
- Unrealistic expectations
- Psychological conditions

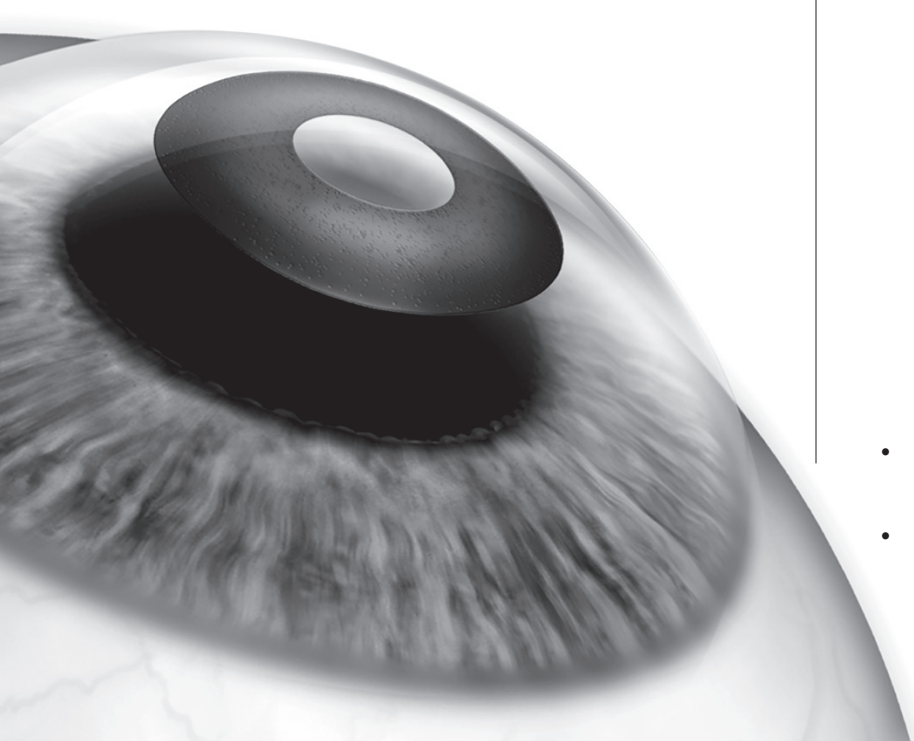
**KEY POINTS**

1. For now, the KAMRA inlay procedure is available exclusively in our Bellevue, WA office.
2. Complete patient selection criteria is outlined in our *KAMRA Inlay OD Clinical Pearls* booklet. Copies can be requested on our OD website at [www.odpcli.com](http://www.odpcli.com) or by calling Heidi at 800.888.9903
3. Establish realistic expectations.
4. Explain that fully optimized vision may take 6 to 12 months to achieve.
5. Monitor post-operative progress.
6. If you have questions, contact our Refractive Surgery Counselors at 800.884.7254 or our Bellevue office ODs at 800.926.3007

**PATIENT DISCUSSION TIPS**

- Encourage patients to test the pinhole effect by looking through a small opening made with their thumb and fingers:
  - With one eye closed, they can look through the small opening to obtain clearer near vision.
  - Explain that unlike this test, the inlay does not restrict peripheral vision.

- Have them view several short Reading Vision Correction videos in our website's video library:
  - KAMRA Corneal Inlay
  - How the Inlay Works
  - The Procedure
  - Visual Recovery
  - Presbyopia (need for reading glasses)
- Explain presbyopia in easy-to-understand terms:
  - Naturally frustrating, impacts almost everyone
  - Over time the eye's natural lens, which is normally elastic and flexible, begins to stiffen making it difficult to change shape and focus up close.
  - Like a camera lens that can no longer zoom
- Ask about daily activities to see if the KAMRA inlay is right for them:
  - How do you feel about reading glasses?
  - How do you use reading glasses in your everyday life?
  - How important are the following activities?
    - Reading text messages
    - Seeing your mobile phone
    - Reading numbers
    - Working on a computer or tablet
    - Performing detailed tasks
    - Driving at night
- Match the KAMRA inlay's value to the patients' needs.
- Outline key benefits that the procedure intends to achieve:
  - Restores everyday vision so you can see text messages, a computer screen and the time on your wrist watch, without the frustration of reading glasses



- Provides a natural range of vision from near to far without blurry zones
- Offers long-term performance to help you enjoy clear near vision over time
- Assess expectations:
  - What are you hoping to achieve with the KAMRA inlay?
  - If you have to occasionally wear reading glasses for some near tasks, will you be satisfied?
- Help maintain realistic expectations:
  - **Q:** Will I ever need to wear reading glasses again?  
**A:** The KAMRA inlay is ideal for individuals who want to be able to do everyday activities without reading glasses. If the idea of being able to go shopping, dine out with friends, read text messages or check the time on your watch without glasses is appealing, the KAMRA inlay is a good option for your lifestyle.
  - **Q:** Can you assure me I will not need reading glasses?  
**A:** While many patients do achieve spectacle independence, this is not the absolute goal. You may need reading glasses when working in dim light, performing a near task for a prolonged period of time, or attempting to read tiny print. Also, when your eyes are tired or “dry”, you may choose to wear reading glasses.
  - **Q:** How much will my near vision improve?  
**A:** The amount of near vision improvement varies by individual. On average, patients are able to read fine print such as medicine labels. While your use of reading glasses will decrease, you may find at times you are more comfortable with reading glasses for extremely small print, in dim lighting conditions or for extended periods of reading.
  - **Q:** When can I expect to see improvement in my near vision?  
**A:** Some patients experience an improvement within 24 hours. However, optimal results are usually achieved

between one and three months post-operatively. Visual recovery depends on personal healing patterns and compliance with your post-operative instructions, follow-up visits and medications.

- Encourage compliance with the post-op regimen and follow-up appointments.
- Discuss the healing process:
  - While some patients see an immediate change in their vision, most will take some time to see the benefits. Patients must understand that this is normal.
  - To speed healing, they must maintain their eye drop regimen, avoid reading glasses and regularly perform reading exercises.

#### PRE-OP EVALUATION

- Prospective candidates must come to our Bellevue, WA office for a free AcuTarget HD diagnostic test to rule out significant dry eye and lens opacity:
  - Evaluate tear film quality and stability
  - Objectively assesses all ocular scatter and lens changes
  - Call our Refractive Surgery Counselors at 800-884-7254 to schedule this test
- Our KAMRA referral form is available at [www.odpcli.com](http://www.odpcli.com). We can also mail, email or fax copies. Just call Heidi at 800-888-9903.
- Requested details include:
  - Ocular history
  - Dominant eye
  - Pupil size
  - VA without correction
  - Present Rx: contacts and glasses
  - Dry refraction
  - Cycloplegic refraction
  - Keratometry readings
  - IOP

CONTINUED ON NEXT PAGE

- Central corneal thickness
- Ocular motility
- Anterior and posterior segment exam

#### POST-OP MANAGEMENT

- Minimum follow-up: 1 day, 1 week, 1, 3, 6 and 12 months
  - We will do the 1 day exam to ensure proper inlay centration and healing.
  - Patients will be returned to you for follow-up from 1 week on.
- For exam details, see pages 15 to 28 of the *KAMRA Inlay OD Clinical Pearls* booklet.
- Please note that we do not require AcuTarget HD testing at 1 month as is noted on page 17 of the *KAMRA Inlay OD Clinical Pearls* booklet.
- If you don't have a copy of this booklet, let us know and we'll send one.

#### STEROID REGIMEN

- 1st week - 1% Prednisolone acetate QID
- 2nd to 4th week - Fluoromethelone/FML (or equivalent) QID
- 2nd month - Fluoromethelone/FML (or equivalent) TID
- 3rd month - Fluoromethelone/FML (or equivalent) BID
- At the end of 3 months - Evaluate patient and if appropriate discontinue steroid therapy.
- Maintaining a proper regimen will optimize outcome and long-term refractive stability.
- Monitor IOP for a significant increase and add an IOP lowering medication as needed.

#### OCULAR SURFACE MANAGEMENT

- Preservative free artificial tears
  - Hourly for 7 days
  - Tapering to q2h for 7 days
  - At least QID thereafter

- Punctal plugs
  - Consider permanent inferior plugs
- Topical cyclosporine-A (Restasis)
  - Strongly consider BID for 2 months (if available)
- Additional therapy
  - Omega-3 fatty acids
- Other dry eye facts
  - Fluctuations in vision and myopic shifts are typically a result of dry eye.
  - Proactive careful management of the ocular surface will boost patient satisfaction.
  - Our AcuTarget HD test can help demonstrate the effects of dry eye on visual quality and identify if patient compliance is an issue.
- Instill fluorescein to assess for:
  - SPK
  - Dryness
  - Integrity of tear film
  - Breaches in the anterior corneal layers

#### ADDITIONAL POST-OP DETAILS

- See our *KAMRA Inlay OD Clinical Pearls* booklet for more details on:
  - Slit lamp exam
  - Topography
  - Inlay recentration
  - Managing wound healing response
  - Laser use after inlay implantation

#### ADDITIONAL COMANAGEMENT RESOURCES

- A number of KAMRA inlay items that may be helpful to your practice are available on our OD website.
- Visit [www.odplici.com](http://www.odplici.com) and select the Resources tab, or call Heidi at 800.888.9903.