



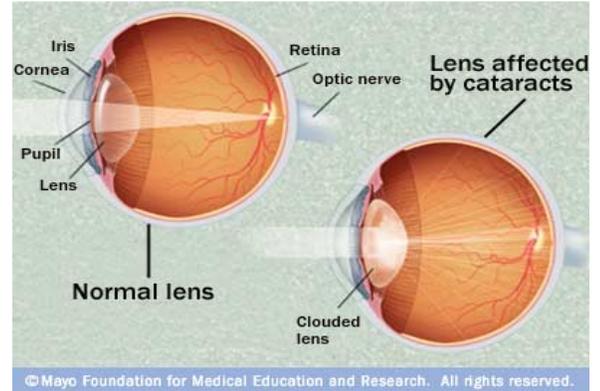
MILLS

EYE +
FACIAL SURGERY

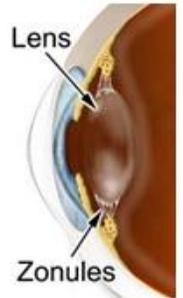
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Cataract Surgery Patient Information

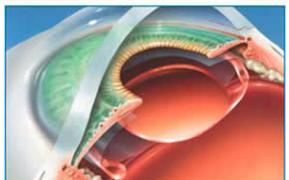
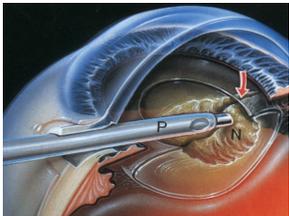
1. Within the human eye, there is a normal structure called the “**lens**”. In youth, this lens is clear, and light rays pass through and are focused by this lens as well as the cornea. Our brain perceives a clear image as long as the lens, cornea, retina, optic nerve, brain, and all parts of the visual system are intact and healthy. In youth, the lens can focus distant, intermediate, and near images clearly because tiny muscles in the eye cause a change in the shape of the lens.



2. As we age, the lens becomes cloudy, and this **cloudy lens is called a “cataract”**. Light rays are distorted as they pass through the cloudy lens leading to a distorted image on the retina that is perceived as blurry vision. As the lens matures, it also loses the ability to change shape necessitating reading glasses for intermediate or near vision. Many patients will experience progressively cloudy vision, similar to the effect of looking through a foggy windshield. If cataracts are not surgically treated, the condition can eventually lead to blindness. The only permanent solution to cataracts is surgical removal of the cloudy lens and replacement with a new, artificial IOL.



3. The eye's natural lens is similar to both an “M&M” candy and an onion in that it has a shell, called a “**Capsule**”, and a center, called the “**Nucleus**”, with several layers in between. The lens is anchored by suspensory “ligaments”, called “**Zonules**”. Think of these as the springs on a trampoline supporting the natural lens instead of a trampoline.
4. Typically, during cataract surgery, the front part of the shell is removed, and the inner cloudy structures are broken into small pieces using ultrasonic energy and removed through small incisions in the cornea. For the procedure, patients receive topical anesthetic eye drops in addition to a relaxing intravenous sedative. Dr. Mills performs micro-incision cataract surgery (MICS), which is considered to be safer and less invasive than previous cataract surgery methods. This technique has greatly improved patient outcomes and reduced complications.
5. After removing the cloudy elements of the lens, a synthetic (man-made) lens implant (typically silicone or acrylic), called an “**IntraOcular Lens**” or “**IOL**” is placed within the eye to refocus distant light clearly onto the retina. There are several types of IOLs depending on the patient’s visual needs.
6. Obviously, the capsule and its supporting zonules must be strong enough to support the implant. Although rare, the capsule or zonules may be too weak to support the implant. If the capsule is too weak, pieces of the cataract may fall into the “back” of the eye, called the vitreous, necessitating additional surgical procedures. Sometimes the implant may be placed in different locations within the eye if the structures are too weak to support it in the normal location. Unfortunately, there is no error-proof way to assess the strength of these tissues prior to surgery, and every cataract surgery



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includes these “risks”. However, cataract surgery is the most commonly performed surgery in the world, and complications from cataract surgery are exceedingly rare.

7. Procedure Details / Frequently Asked Questions (FAQs):

- a. Cataract surgery is “outpatient surgery”, meaning that no hospital stay is expected
- b. You should plan to be at the surgical facility for several hours, up to 3-4 is possible
- c. The anesthesia for cataract surgery is expected to be “Topical” numbing drops and intravenous (IV) sedation with or without a “peribulbar” (into the orbit around the eye) injection as needed. It is not general anesthesia - no tube down the throat, no nausea afterwards expected.
- d. You’ll need a driver for the day of surgery and the day after
- e. Do NOT eat or drink anything after midnight the night prior to surgery
- f. DO take your high blood pressure medications with a sip of clear water
- g. Ask your doctor about the proper instructions for diabetic medications such as insulin when not eating breakfast the day of surgery
- h. Surgical time – as long as it takes, average <20 mins
- i. Proper placement of implant depends on strength of internal eye structures - we cannot completely assess this preoperatively. Therefore, NO Guarantees are ever made with any surgery.
- j. Every patient heals differently. Therefore, NO Refunds are given for patient dissatisfaction.
- k. Calculations for IOL can be affected by contact lens wear – **NO contact lens wear for AT LEAST 2 weeks prior to measurements!** We also reserve the right to measure as many times as we deem necessary to arrive at the most accurate calculations possible. Do not wear contact lenses between measurements either.

8. Astigmatism

- a. A condition in which the shape of the cornea varies in different directions. It affects the image entering the eye from all distances. It means the eye may require correction to achieve a clear image from distant, intermediate, and/or near objects.
- b. Can be corrected with
 - i. Glasses
 - ii. Contact Lenses
 - iii. Limbal Relaxing Incisions (LRIs)
 - iv. Toric IOLs
 - v. Refractive Surgery (LASIK / PRK)
- c. Even after cataract surgery, you may need glasses for best distance vision if you have astigmatism.

9. Spherical Aberration

- a. A condition in which the image is blurred because the more peripheral light rays are “refracted” or bent more than the central light rays
- b. Typically worse in dim light



- c. Typically counter-acted by the shape of the natural lens
- d. Corrected with “**Aspheric**” IOL as spherical IOLs will not counteract this

10. Distance / Near / Intermediate Focus

- a. Vision is typically broken into 3 zones:
 - i. **Distance** (>6 ft.) - Driving, TV, movies, golf, etc.
 - ii. **Intermediate** (around 2-3 ft.) – Computer, tablets, cell phones, menus, dashboards, etc.
 - iii. **Near** (around 1 ft.) – Soup cans, crossword puzzles, check book, etc.

11. Risks:

- a. Pain
- b. Bleeding – avoid aspirin until 2 days after procedure ONLY if cleared by your primary doctor or cardiologist
- c. Infection
- d. Nerve / Muscle / Retinal / Corneal Damage or Swelling
- e. Glaucoma
- f. Loss of vision / eye / life
- g. Need for further surgery
- h. Risk of anesthesia
- i. Persistent or recurrent blurred vision
- j. Continued need for glasses

12. Benefits:

- a. Improved vision
- b. Reduced dependency on glasses or contacts

13. Common Side Effects:

- a. Temporary blurry vision due to swelling of the cornea (worse for denser cataracts and small eyes)
- b. Temporary tearing, light sensitivity, foreign body sensation

14. IntraOcular Lens (IOL) Choices and Implications on Post-Operative Vision

At [Mills Eye + Facial Surgery](#), we offer several choices of popular, premium IOL brands, including Symphony®, Tecnis®, Restor®, and Crystalens®. The multiple IOL’s available have been created to suit the vision needs of a variety of patients. In many cases, patients with refractory errors can see clearly without the need for prescription glasses or contact lenses following surgery. Our IOL options include monofocal and multifocal lenses, as well as toric lenses for patients with astigmatism. The distance at which the implant focuses and the range of clear focus are key factors in determining the expected need (or lack thereof) for glasses or contacts following surgery. Vision can be broken down into 3 focal distances: Distance, Intermediate, and Near. Monofocal IOL’s provide clear focus at one distance, requiring patients to still use corrective eyewear for the other distances. Extended Range, Accommodating, and Multifocal IOL models provide more flexible capabilities allowing you to enjoy sharp vision for distance and intermediate or near work. The right choice for you depends upon your needs, lifestyle, and budget.



a. IOL Options Covered by Insurance

- i. **Basic IOLs** (covered by insurance) can focus light from only one distance (essentially distance or near, but not both). Typically patients elect to target both eyes for distance and wear reading or computer glasses (progressives, bifocals, trifocals, etc.). Choosing basic IOLs means you are likely to need glasses for intermediate tasks such as computers, and near tasks such reading a pill bottle.
- ii. **Monovision** - Some patients elect to use basic IOLs, but have one eye set for distance and one eye set for near to reduce their need for glasses. Frequently, this option, called monovision, can result in a feeling of dizziness or imbalance. This is not a good idea unless the patient has proven that they can successfully wear contact lenses in similar fashion.
- iii. **“Aspheric IOLs”** are designed to reduce spherical aberration and provide quicker reaction times when driving in addition to other optical benefits. They can also be used in a monovision fashion.

b. IOL Options that You Pay Extra For

- i. **“Premium IOLs: Extended Range, Accommodating, Multifocal, and Toric IOLs”** are designed to provide a wider range of image clarity or multiple zones of clarity even without glasses. Typically the goal is to provide intermediate and/or near vision (for computer and/or reading) in addition to distance vision. For patients with visually-significant astigmatism, **“Toric IOLs”** can be used to reduce astigmatism. While they can be (and commonly were) used in a monovision fashion, they are now available in Extended Range and Accommodating IOL's, and, therefore, are used almost exclusively in our practice this way.
- ii. You will **pay a surcharge or upgrade fee to the practice** for these types of implants due to the additional testing, measurements, and calculations performed as well as the surgeon's expertise in optimizing results with these implants. You will also have to **pay for the implant at the surgery center** the day of your surgery, if not sooner, as the facilities special order these custom implants for each patient. The additional equipment, time, experience, analysis, etc. required to optimize your results are what you are paying the surgeon for. You pay the surgery facility for the actual lens implant separately. “Premium” IOLs are very susceptible to astigmatism, ocular surface diseases such as dry eyes, posterior capsule opacification, and decentration or rotation of the IOL after surgery. These conditions may limit the effectiveness of the IOL in providing clear vision. These implants are not recommended for patients with other ocular pathology such as macular degeneration.
- iii. To get the best possible results from Premium IOLs, our \$1500 per eye fee includes Limbal Relaxing Incisions (LRIs) for astigmatism reduction and / or laser vision correction (PRK or LASIK), but only if and when deemed necessary by our surgeons. (Beware that other places may charge less for the IOL, but do NOT include these



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additional procedures, which typically total more than \$3000 when added to the cost of the IOL.)

- c. *ANY IOL may require a separate laser procedure called “YAG Posterior Capsulotomy (YAG PC)” for optimum results (clears the opacified posterior lens capsule). Any applicable copays WILL be charged in compliance with insurance guidelines for “YAG Posterior Capsulotomy”, as it is illegal to waive such fees. YAG Posterior Capsulotomy can typically not be done until at least 3 months after IOL placement.
- d. *You do NOT have to select an IOL other than that which insurance will cover, but you should know your options.*

15. Pertinent Medical History: I either take the following medications or have the following diagnoses:

- | | | |
|--------------------------------------|---|---|
| a. Flomax (tamsulosin) | + | - |
| b. Aspirin / Plavix / Coumadin / Etc | + | - |
| c. Diabetes | + | - |
| d. High Blood Pressure | + | - |
| e. Prior Retinal Surgery | + | - |

16. Affirmation:

- a. I have read and understand the above information.
- b. All of my questions have been answered to my satisfaction.
- c. I would like the following IOL(s) (Circle Choice below):

Standard IOL

Covered by insurance
Likely distance vision only
No correction for astigmatism
(Can add LRI for \$300)
Expect to need at the least
computer and reading glasses

Premium IOL

+ Money out of pocket
Distance and Intermediate (Near Vision Possible)
Includes astigmatism / laser vision
correction if we deem necessary
(ie. Symphony, Symphony Toric IOL, etc.)
Best chance to be free from glasses

Notes: _____

+ Ophthalmology
+ OculoFacial
Plastic Surgery
+ Facial Cosmetic
Surgery

Patient Signature: _____ Date: _____