



Cataract Surgery and/or Implantation of an Intra-Ocular Lens

*** Please review this information PRIOR to your appointment and arrive prepared with any questions. ***

This information is given to you so that you can make an informed decision about having eye surgery. ***Please take the time to read and review this entire document.*** Take as much time as you wish to make your decision to have eye surgery. You have the right to have all your questions answered before signing any consent forms.

Nature of the Procedure

A cataract is an opacity or cloudiness in the natural lens. Cloudiness in the natural lens impairs its ability to focus light, causing blurred vision. Vision can be restored by removing the hazy natural lens and replacing it with a clear artificial lens called an intra-ocular lens (IOL). The surgery is called cataract surgery. Your eye will be numbed and you may also be given sedation through an IV. An incision, or opening, is made in the eye. A tiny vibrating probe is inserted through the incision to break the natural lens up into small pieces. These pieces are gently suctioned out of your eye through the probe. After your natural lens is removed, the IOL is placed inside your eye.

Potential Benefit

Removing the cloudy lens may restore crisp, clear vision, allowing you to function better in your normal activities. Except for unusual situations, a cataract surgery is indicated only when you cannot function satisfactorily due to decreased vision caused by the cataract. You may decide not to have cataract surgery at this time. Cataract surgery will not correct other causes of decreased vision, such as glaucoma, diabetes, or age-related macular degeneration.

Alternative Treatments

The alternative to cataract surgery now is to do nothing or delay the surgery. Your vision may get worse over time, but cataract surgery can be done in the future if your vision worsens. In the great majority of patients, no harm comes to the eye from delaying cataract surgery. There is no pressure or urgency in performing cataract surgery now; you may wait until you feel that you are ready.

Risks, Limitations and Side Effects of Cataract Surgery

Like all surgical procedures, cataract surgery is not absolutely safe. The following paragraphs list possible risks, limitations, and side effects of this procedure.

As a result of the surgery or associated anesthesia, it is possible that your vision could be made worse. In some cases, complications may occur weeks, months or even years later. These and other complications may result in poor vision, total loss of vision, or even loss of the eye in rare situations. Depending upon the type of anesthesia, other risks are possible, including cardiac, stroke or respiratory problems, and, in rare cases, death. Although all of these complications can occur, their incidence following cataract surgery is low.

Complications of removing the natural lens may include hemorrhage (bleeding); rupture of the capsule that supports the IOL; perforation of the eye; clouding of the outer layer of the eye (corneal edema), which may require correction with a corneal transplant; swelling in the central area of the retina (called cystoid macular edema); retained pieces of lens in the eye, which may need to be removed surgically; infection; detachment of the retina (which occurs more commonly if you are highly nearsighted); droopy eyelid; increased astigmatism; glaucoma; and double vision. These and other complications may occur whether or not an IOL is implanted and may result in poor vision, total loss of vision, or even loss of the eye in rare situations. There may be unknown complications of cataract surgery. Additional surgery may be required to treat these complications.

Complications associated with the IOL may include increased night glare and/or halo, double or ghost images, and slippage of the IOL inside the eye. In some instances, corrective lenses or surgical replacement of the IOL may be necessary for adequate visual function following cataract surgery.

Complications associated with local anesthesia injections around the eye include perforation of the eye, destruction of the eye nerve, interference with the circulation of blood flow in the retina, droopy eyelid, respiratory depression, hypotension, cardiac problems, and in rare situations, brain damage or death. For most patients, the eye can be anesthetized with eye- drops or other solutions without the need for anesthetic injections around the eye.

The selection of the proper IOL, while based upon sophisticated equipment and computer formulas, is not an exact science. After your eye heals, you may be more nearsighted or more farsighted than was intended. Patients who are highly nearsighted or farsighted before surgery have a greater risk that the eye's prescription is different than planned. Patients who have had LASIK or other refractive surgeries are also difficult to predict precisely. Additional surgeries such as IOL exchange, placement of an additional IOL, or vision correction surgery may be needed if you are not satisfied with your vision after cataract surgery. You may need to wear glasses or contact lenses after surgery to obtain your best vision. While cataract surgery has the potential to restore excellent vision, perfect vision is not a realistic expectation since nothing is as good as youthful, healthy eyes. You should be able to resume your normal activities within 2 or 3 days, and your eye will usually be stable within 2 to 6 weeks, at which time glasses or contact lenses can be prescribed if needed.

In rare cases, it may not be possible to implant the IOL you have chosen, or any IOL at all. In this situation, the surgeon will select the best option for you as dictated by the surgical situation, which may be different than your selection prior to surgery. The results of surgery cannot be guaranteed.

Additional treatment and/or surgery may be necessary. You may need laser surgery after cataract surgery to correct clouding of vision.

If you have a high degree of hyperopia (farsightedness) and/or your eye is smaller than average, your risk for a complication known as nanophthalmic choroidal effusion is increased. This complication could result in difficulties completing the surgery and implanting a lens, or even loss of the eye. If you have a high degree of myopia (nearsightedness) and/or your eye is larger than average, your risk for a retinal detachment is increased. Retinal detachments can usually be repaired but may lead to vision loss or blindness. Other factors may reduce the visual outcome of cataract surgery, including other eye diseases such as glaucoma, diabetic retinopathy, age-related macular degeneration, or your individual healing ability.

Since only one eye will undergo surgery at a time, you may experience a period of imbalance between the two eyes. This usually cannot be corrected with spectacle glasses because of the marked difference in the prescriptions, therefore you will need to function with only one clear eye for distance vision. You will need to take precaution when navigating steps, stairs or curbs. In the absence of complications, surgery in the second eye can usually be done two to three weeks later.

Your vision will be foggy after the procedure and you may be sedated, so we ask you not to drive a car until your vision is safe for driving. Postoperative care is important to a good outcome. You must agree to attend all recommended aftercare visits and to use all medication as prescribed.

Cataract Surgery vs. Refractive Cataract Surgery

Cataract surgery is meant to just correct the cataract and we expect that your health care insurance plan or Medicare will pay for it in accordance with your plan rules. Copays and deductibles are the responsibility of the patient. With standard cataract surgery alone you should expect to wear glasses full-time after surgery.

Refractive cataract surgery is designed to minimize the use of glasses, such as performing LASIK laser vision correction for people with nearsightedness, farsightedness, and astigmatism. Refractive cataract surgery includes a more detailed pre-operative assessment, proprietary focusing power calculations, addressing astigmatism, use of specialty lens implants, and other techniques including any required fine-tuning done after surgery with LASIK. Refractive surgery is never covered by insurance plans or Medicare; the patient is financially responsible for this cost which can be up to \$6,000 for both eyes. Refractive surgery will provide you a large degree of good vision without glasses, but it won't give you the eyes of a 21 year old.

Refractive Surgery with Concurrent Treatment of Pre-Existing Astigmatism: Astigmatism is a condition where the outer focusing portion of the eye, the cornea, is somewhat oval shaped instead of being round or spherical, resulting in blurred vision. Large degrees of astigmatism are usually best treated with refractive cataract surgery using a premium astigmatism correcting IOL called a Toric IOL.

Refractive Surgery with Concurrent Treatment of Presbyopia and Alternatives for Near Vision after Surgery: All people have or will eventually develop an age-related condition known as presbyopia. Presbyopia is the reason that reading glasses become necessary,

typically after age 40, even for people who have always had good vision without glasses. Presbyopic individuals require bifocals or separate reading glasses in order to see clearly at close range. Presbyopia can be addressed with refractive cataract surgery using a premium IOL.

Depending on your desires, you can have just standard cataract surgery with the understanding that you will wear glasses full-time after surgery. Or, you can have refractive surgery and services at the same sitting as cataract surgery to maximize your vision so that you can decrease the need for glasses for many activities. This is an important decision as it will impact every waking moment for the rest of your life. Once an IOL is implanted, it will not be removed or replaced.

Dr. Allaman will recommend the IOL option(s) that would benefit you most based on your visual prognosis and your individual lifestyle needs. Evaluation to fully determine if you are a candidate for “refractive cataract surgery” with a premium IOL will require additional testing at the time of your pre-operative appointment. This testing is not covered by insurance and the \$225 non-refundable fee will be due prior to testing.

Intra-Ocular Lens Options

There are several options available to you to achieve distance and/or near vision after cataract surgery.

- **STANDARD SINGLE-FOCUS IOL AND GLASSES:** You can choose to have a standard, single focus IOL implanted and then be required to wear glasses for most activities including, distance vision, intermediate (computer) vision, and reading vision. This type of lens is not intended to provide freedom from glasses, rather it is simply used as a replacement lens after the cataract is removed.
- **PREMIUM TORIC IOL:** The Toric IOL is designed for patients who have higher degrees of astigmatism. The Toric IOL can address astigmatism in order to provide sharper vision for the patients with less reliance on glasses. If astigmatism is left uncorrected, it affects all types of vision, including near vision, intermediate vision, and distance vision, and then glasses would be required for essentially all activities. The Toric IOL is specifically designed to treat astigmatism but it does not give the wider range of vision of accommodating or multi-focal IOLs; even so, it is often the best choice lens designed for patients with larger degrees of astigmatism. If Toric IOLs are implanted in both eyes for distance vision, then glasses would need to be used for near and intermediate vision.
- **PREMIUM ACCOMMODATING IOL:** The accommodating IOL is designed after a normal, younger human lens, where the focusing muscles of the eye are able to alter the position or shape of the lens, leading to improved ability to focus. These IOLs provide good distance and intermediate vision, and allow less dependence on glasses for many tasks. There is a variable response to the amount of near focusing ability that the patient will recover after implantation of an accommodating IOL. While some patients may recover good reading near vision, intermediate vision, as well as good distance vision, many patients still require glasses for some near activities.

- **PREMIUM MULTI-FOCAL IOL:** A “multi-focal” lens corrects for both distance vision and other ranges, such as near or intermediate. These multi-focal IOLs do not adjust within the eye like accommodating IOLs, rather the multi-focal IOLs have multiple zones on the lens surface, often like concentric rings, that restore the focusing power of the lens at multiple ranges. A period of neuro-adaptation may be required to appreciate the full benefits of a multi-focal lens. This may take several weeks or even months. While the goal of a multi-focal IOL is to reduce your dependency on glasses, additional glasses may be needed at times to enhance vision, especially in low light conditions. The multi-focal IOL may also cause some visual side effects such as rings or circles around lights at night. If complications occur at the time of surgery, a single focus IOL may need to be implanted instead of a multi-focal IOL. If you choose a multi-focal IOL, it is possible that not all of the near (and intermediate) focusing ability of your eye will be restored.

Even if you have chosen an accommodating IOL or a multi-focal IOL, glasses or contacts may still be required for further improvement in your distance, intermediate and/or reading vision.

At the conclusion of your cataract evaluation appointment, Dr. Allaman will help you decide whether cataract surgery is indicated for you at this time, will recommend the best IOL option(s) based on your exam and preliminary testing, and will answer any questions you have regarding the surgical procedure.

Thank you for the opportunity to help you achieve better vision. We look forward working with you.

PLEASE BRING ALL PAPERWORK THAT YOU HAVE RECEIVED TO YOUR APPOINTMENT. THANK YOU.

Patient Name: _____ DOB: _____ Date: _____

VISUAL FUNCTION – 14 QOL QUESTIONNAIRE

Because of your vision, how much difficulty to you have with the following activities?

Check the box that best describes how much difficulty you have, **even with glasses**.

If you do not perform the activity for reasons unrelated to your vision, select N/A

<u>Activity</u>	<u>None</u> <small>4</small>	<u>A Little</u> <small>3</small>	<u>Moderate</u> <small>2</small>	<u>Great Deal</u> <small>1</small>	<u>Unable To Do</u>	<u>N/A</u> <small>0</small>
1. Reading small, print, such as medicine bottle labels, a telephone book, or food labels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Reading a newspaper or a book	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Reading a large-print book or large-print newspaper or numbers on a telephone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Recognizing people when they are close to you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Seeing steps, stairs or curbs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Reading traffic or street signs or store signs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Doing fine handwork like sewing, knitting, crocheting, carpentry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Writing checks or filling out forms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Playing games such as bingo, dominos, card games, or mahjong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Taking part in sports like bowling, handball, tennis, golf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Cooking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Watching television	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you currently Drive a car?	Yes		No	
How much difficulty do you have driving during the day because of your vision?	None <small>4</small>	A Little <small>3</small>	Moderate amount <small>2</small>	A Great Deal <small>1</small>
How much difficulty do you have driving at night because of your vision?	None <small>4</small>	A Little <small>3</small>	Moderate amount <small>2</small>	A Great Deal <small>1</small>
Have you previously driven a car but since stopped?	Yes		No	
When did you stop driving?	Less than 6 months ago	6 to 12 months ago	More than 12 months ago	
Why did you stop driving?	Poor Vision		Other Illness	Other Reason

- Please Turn Over -

Cataract surgery can almost always be safely postponed until you feel you need better vision. If stronger glasses won't improve your vision any more, and the only way to help you see better is cataract surgery, do you feel your vision is bad enough to consider cataract surgery now?

- Yes, I feel that my vision is bad enough that I need to consider cataract surgery now.
- No, my vision is not that bad and I am not ready to consider cataract surgery yet.

Patient Signature: _____ Date: _____

Office Use Only: (C) # checked boxes in column
(F) factored amounts

None	A little	Moderate	Great deal	Unable
X4 =	X3 =	X2 =	X1 =	0

C = total number of checked boxes in column

F = sum of the Factored amounts

V = Final V-14 score

Final Score: (F _____ / C _____) x 25 = V

V =

Sum of Points	Degree of Visual Impairment	VF score
0 to 5	very severe impairment	0 to 9
6 to 16	severe impairment	10 to 29
17 to 41	moderate impairment	30 to 74
42 to 51	mild impairment	75 to 92
52 to 54	minimal impairment	93 to 98
55 to 56	no visual impairment	99 to 100

DRY EYE QUESTIONNAIRE

Patient Name or ID: _____ Date: _____

Technician: _____

Have you ever been diagnosed with Dry Eye Disease or Ocular Surface Disease?

Y N When? _____

Do you have any of the following symptoms?

- | | |
|---|--|
| <input type="checkbox"/> Blurry vision | <input type="checkbox"/> Tired eyes, eye fatigue |
| <input type="checkbox"/> Redness | <input type="checkbox"/> Stringy mucus in or around the eyes |
| <input type="checkbox"/> Burning | <input type="checkbox"/> Foreign body sensation |
| <input type="checkbox"/> Itching | <input type="checkbox"/> Contact lens discomfort |
| <input type="checkbox"/> Light sensitivity | <input type="checkbox"/> Scratchy feeling of sand or grit in the eye |
| <input type="checkbox"/> Excess tearing/watering eyes | |

Have you had any of the following surgeries?

Cataract: Y N Glaucoma: Y N Refractive Surgery: Y N

Do you use?

- Contact lenses
- OTC eye drops such as artificial tears
- Rx eye drops for Dry Eye Syndrome (e.g., Restasis)
- Rx eye drops for Glaucoma (e.g., Xalatan, Timolol)
- Rx eye drops for Allergy (e.g., anti-inflammatory, antihistamine)
- Nutritional supplements (e.g., flaxseed oil, omega-3)

Are your symptoms related to the following environmental conditions?

- Windy conditions
- Places with low humidity (e.g., airplanes/hospital)
- Areas that are air conditioned/heated

Are you taking any of the following medications?

- Antihistamines/decongestants
- Antidepressant or anti-anxiety
- Oral corticosteroids
- Hormone replacement therapy or estrogen
- Antihypertensives (e.g. diuretic, beta-blocker)
- Accutane or other oral treatment for acne

Have you ever had punctal occlusion? Y N

If the information provided in this form, in conjunction with other clinical data, raises the suspicion of Dry Eye Disease, then obtaining a Tear Osmolarity Test may be indicated.

I reviewed this form and based on the information contained therein and other available clinical data, I suspect that this patient has Dry Eye Disease and obtaining a tear osmolarity measurement is medically necessary for the diagnosis and management of this patient's ocular problem(s).

Attending Clinician: _____ Date: _____