Cataract Surgery And/Or Implantation of an Intraocular Lens
Washington Pacific Eye Associates

WHAT IS A CATARACT?
The lens in the eye can become cloudy and hard, which is a condition known as a cataract. Cataracts can develop from normal aging, from an eye injury, or from steroid medications. Cataracts may cause blurred vision, dulled vision, sensitivity to light and glare, and/or ghost images. If the cataract changes vision so much that it interferes with your daily life, the cataract may need to be removed. Surgery is the only way to remove a cataract. While you can opt out of surgery, without the surgery, your vision loss from the cataract will continue to get worse.

HOW WILL REMOVING THE CATARACT AFFECT MY VISION?
The goal of cataract surgery is to correct the decreased vision that was caused by the cataract. During the surgery, the ophthalmologist (eye surgeon) removes the cataract and puts in a new artificial lens called an intraocular lens or IOL. The IOL will be left in the eye permanently. Cataract surgery will not correct other causes of decreased vision, such as glaucoma, diabetes, or age-related macular degeneration. Most people still need to wear glasses or contact lenses after cataract surgery for either near and/or distance vision and astigmatism unless they chose a special lens that can correct these issues.

If you need surgery on both eyes, you can have your second eye done 2-4 weeks after the first surgery is done. We cannot operate on both eyes at the same time.

TIMELINE

Four weeks before surgery
If you wear hard or gas permeable contact lenses, you must leave them out of your eyes for four weeks before your preoperative eye examination. This is done because the contact lens rests on the cornea and distorts its shape, which can affect the accuracy of the doctor’s measurements of the IOL power. For soft lenses please remove your soft contact lenses for at least one week before your pre operative appointment.

Two weeks before surgery
If you agree to have the surgery, you will undergo a complete eye examination by your surgeon. This will include measurement of the pressures inside your eye (tonometry), measurement of the curvature of your cornea (keratometry), ultrasonic measurement of the length of your eye (axial length), intraocular lens calculation (biometry) to determine the best estimate of the proper power of the
implanted IOL, microscopic examination of the front part of your eye (slit-lamp examination), and examination of the retina of your eye.

Your preoperative examination needs to be within two weeks of the surgery.

Please make us aware if you have taken FLOMAX (tamsulosin) at any time in your life for urinary frequency. Patients generally do quite well with cataract surgery as long as the doctor is aware beforehand. You do not need to stop this medication before surgery.

If you are currently taking COUMADIN, you must let your doctor know. Do not stop taking COUMADIN if you are currently taking this medication. Please arrange to have your INR checked two weeks before surgery to make sure this number is below 3.0 before surgery.

Continue taking all other eye drops that you take. Do not stop or modify the dose that you take before or after surgery.

If you have been told you need to take antibiotics before any dental work, do not worry. You do not need antibiotics before this type of clean eye surgery.

One week before surgery
Please arrange transportation to the surgery center on the day of surgery and to our office the day after surgery for your post operative visit. Please ask the driver to be flexible about the arrival and departure times as these can change at times. The amount of time at the surgery center is usually around two hours and they can drop you off and pick you up if that is more convenient.

One day before surgery
You have been given a prescription or bottles of medication for before and after surgery. Start the antibiotic drop only one day before surgery. The name of this medication can be one of the following names: Zymar, Ofloxacin, or Besivance

Please take this medication a total of four times one day before surgery (breakfast, lunch, dinner, and bedtime.) Please use only one drop only in the eye that is going to have the operation.

The day of surgery
Please direct any questions about this section directly to the surgery center if you need clarification. 425-899-5656

The surgery center will call you several days before the surgery and instruct you what to eat or drink on the day of surgery and how to take your medications including insulin for diabetics. Please write down the instructions that they give you on the phone and if you have any questions please call them back to clarify the instructions. **We may need to cancel your surgery if the instructions are**
not followed, so please make sure you understand them when they call you.

On the morning of your surgery, please place one drop of the antibiotic medication in your eye.

Completely remove all lotions, makeup, powder, eyeliner, mascara, and sunscreen from your face.

Please remove all of your jewelry and leave it at home.

Wear clothing that is easy to remove, because you will need to change into a hospital gown once you arrive at the surgical center.

**At the surgical center**

Evergreen Surgical Center is located on the 5th floor of the Evergreen Surgery and Physicians Center, adjacent to Evergreen Hospital Medical Center. There is direct access to Evergreen Surgical Center from the plaza level of the parking garage with ample free parking available.

The address is: 12909 124th Ave NE
Kirkland, WA 98034

The nurse will provide you with a cap to wear over your hair and a gown. You will be assisted to a comfortable reclining chair where you will rest. An anesthetic eye drop will be administered followed by dilating gel. Your general health is monitored, and you will be offered a pill to help you relax.

Drops will be given to ensure your comfort before, during and after surgery. A clear plastic eye shield will be taped on after the surgery is done and will remind you not to touch or rub your eye.

After your surgery you will be offered something to eat and drink. The nurse will review your post-op instructions with you. This is a good opportunity to get any questions answered that you might have. You will need someone to drive you home after surgery. Plan on spending approximately two hours at the surgery center.

**After Surgery:**

Watch TV, if you like. You may read if it doesn’t cause any discomfort. Resume your normal diet.
Do not strain to lift; don't rub your eye. You make take the eye shield off when you get home, but please use it to cover your eye if you take a nap.

Take 1-2 Tylenol tablets every 4-6 hours if needed for mild discomfort. Call if that is insufficient.

Blurry vision, tearing and a scratchy, sandy feeling are common the first day after surgery. Close your eyes and rest them if this happens.

**The day after surgery**

Bring all medications, instruction sheets and supplies to every post-operative visit. You need a driver for this appointment.

**At Any Time:** Call the office immediately, (425) 889-2020, if you have:

- Pain unrelieved by Tylenol, persistent irritation, increased redness or discharge, worsening vision, spots or flashes in your vision.

**Permitted Activity Week by Week**

**During the first week**

Avoid getting dirty water, creams, lotions, or make-up in the eye. Please make sure you are keeping your eyelids clean. You can clean them using this procedure:

1. Take a clean washcloth and wet it with warm water. Wring it out and place it over the closed eyelids for five minutes. This will help soften the crusts and loosen the oily debris. Rewet as necessary to maintain the desired temperature.

2. Fill a small container with 2 ounces of warm water and add 3 drops of baby shampoo.

3. Moisten a cotton ball, close your eyes and massage the area along the base of the eyelashes for 30 seconds. Your eyes should not be squeezed tightly shut during this, but closed softly as if you were sleeping.

4. Rinse your eyes will cool clean water and gently pat dry with a clean towel.

Wear sunglass protection, especially outdoors.

Use moderation in your activities:

- Walking, running and golf are OK. Wash your hands carefully and avoid touching or rubbing your eye.
- Do not swim, lift weights or engage in contact sports, including tennis and
racquetball.

**During the second week**

Don’t engage in activities risking direct impact to your eye. Still no weight lifting. Aerobics are OK.

Wearing eye make-up is fine.

There may still be some redness, itching, mild discomfort or bruising around the eye. These sensations will decrease and your vision will improve slowly.

**4 Week Postoperative Visit**

You will receive your prescription for glasses if needed at this visit. You can resume all normal activities.

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**MORE INFORMATION ABOUT YOUR IOL (Intraocular Lens)**

The implants used are made of either silicone or PMMA (plastic). We will take some measurements of your eyes to determine which lens is best suited for you. The IOL will never be “rejected” because it is not made out of human tissue, and we have never needed to remove a lens because the body doesn’t accept it. While the method used to calculate the power of the IOL is very accurate in most patients, the final result may be different from what you and your surgeon planned. As the eye heals, the IOL can shift very slightly toward the front or the back of the eye. The amount of this shift is not the same in everyone, and it may cause different vision than predicted. If the eye’s visual power after surgery is considerably different than what was planned, surgical replacement of the IOL might be considered. It is usually possible to replace the IOL and improve the situation. Patients who are highly nearsighted or highly farsighted have the greatest risk of differences between planned and actual outcomes. Patients who have had LASIK or other refractive surgeries are especially difficult to measure precisely.

**PRESBYOPIA AND ALTERNATIVES FOR NEAR VISION AFTER SURGERY**

Patients who have cataracts have presbyopia, which is a condition caused by aging that develops when your eye loses its ability to shift from distance to near vision. Presbyopia is the reason that reading glasses become necessary, typically after age 40 even for people who have excellent distance and near vision without glasses. Presbyopic individuals require bifocals or separate (different prescription) reading glasses in order to see clearly at close range. There are several options available to you to achieve distance and near vision after cataract surgery. This is probably the most important decision you need to make about your cataract surgery, so please take the time to review your options and ask questions.
• GLASSES. You can choose to have a monofocal (single focus) IOL implanted for distance vision and wear separate reading glasses, or have the IOL implanted for near vision and wear separate glasses for distance. You will **not** be able to see both distance and up close with the standard lens used for cataract surgery.

• MONOVISION. You can chose to have one eye focused for distance and one eye focused up close. This is only an option if you have tried this successfully before in contact lenses.

• MULTIFOCAL IOL. The ophthalmologist could implant a “multifocal” IOL. This is a newer, “deluxe” type of IOL that provides distance vision AND restores some or all of your eye’s ability to focus. It corrects for both distance vision and other ranges, such as near or intermediate. Choosing this option will usually lead to higher out-of-pocket expenses since most insurance companies only pay for a monofocal (single focus) lens.

**INFORMATION ABOUT TREATING ASTIGMATISM**

Patients with nearsightedness and farsightedness often also have astigmatism. An astigmatism is caused by an irregularly shaped cornea; instead of being round like a basketball, the cornea is shaped like a football. This change in shape can make your vision blurry. There are several treatment options for astigmatism:

- Glasses. You can have an IOL for near or distance vision and continue to wear glasses or contact lens for the astigmatism;
- TORIC IOL. You can have a toric IOL placed in your eye that corrects the astigmatism
- REFRACTIVE SURGERY. You can have refractive surgery called LASIK or PRK after your cataract surgery has healed
- LIMBAL RELAXING INCISIONS. Your surgeon can perform a procedure before, during, or after cataract surgery called a limbal relaxing incision. A limbal relaxing incision (LRI) is a small cut or incision the ophthalmologist makes into your cornea to make its shape rounder. More than one incision may be required.

**ANESTHESIA, PROCEDURE, AND POSTOPERATIVE CARE**

The ophthalmologist or the anesthesiologist/nurse anesthetist will make your eye numb with drops. You will not need any shots to numb the eye. You may also elect to have a pill to help you relax before surgery. We usually use VALIUM or VERSED. These are very safe medications, but please check with your pharmacist or primary care doctor to see if it would be safe for you to take this type of medication.

An incision, or opening, is then made in the eye. This is at times self-sealing but it may require closure with very fine stitches (sutures) which will be removed around 1-2 months after surgery. The natural lens in your eye will then be removed. There are several ways to remove the lens; the most common
technique is called phacoemulsification, which uses a vibrating probe to break the lens up into small pieces. These pieces are gently suctioned out of your eye through a small, hollow tube inserted through a small incision into your eye. After your natural lens is removed, the IOL is placed inside your eye.

Your eye will be examined the day after surgery by your surgeon or an eye doctor chosen by your surgeon, and then at intervals determined by your surgeon. During the immediate recovery period, you will place drops in your eyes for about 2 to 4 weeks, depending on your individual rate of healing. If you have chosen monovision or a multifocal IOL to reduce your dependency on glasses or contacts, they may still be required either for further improvement in your distance vision, reading vision, or both. You should be able to resume your normal activities within 2 or 3 days, and your eye will usually be stable within 3 to 6 weeks, at which time glasses or contact lenses could be prescribed.

RISKS OF CATARACT SURGERY
All operations and procedures can result in complications, injury, or even death, from both known and unknown causes. The major risks of cataract surgery with implantation of an IOL include, but are not limited to:

• Complications of removing the natural lens may include bleeding (hemorrhage); rupture of the capsule that supports the IOL; clouding of the normally clear outer layer of the eye called the cornea which can be corrected with a corneal transplant; swelling in the central area of the retina, which usually improves with time; retained pieces of lens in the eye, which may need to be removed surgically; infection; detachment of the retina; uncomfortable or painful eye; 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. Additional surgery may be required to treat these complications. The cost for this additional surgery is not included in the price you pay for the cataract surgery.

• Complications associated with the IOL may include increased night glare and/or halos, double or ghost images, and dislocation of the IOL. Multifocal IOLs may increase the likelihood of these problems, so you should think carefully about how these problems might affect your job, your hobbies, and your daily life. In some instances, corrective lenses or surgical replacement of the IOL may be necessary for adequate visual function following cataract surgery.

• Complications associated with limbal relaxing incisions include damage to the cornea, infection, and fluctuating vision while the incision heals. They can also lead to under- and over-correction; if this occurs, another procedure and/or glasses or contact lenses may be required.

• Multifocal (multiple focus) IOLs may reduce dependency on glasses but might also result in less sharp vision, which may become worse in dim light or fog. They may also cause some visual side effects such as rings or circles around lights at night. It may be difficult to distinguish an object
from a dark background, which will be more noticeable in areas with less light. Driving at night may be affected. If you drive a lot at night, or perform delicate, detailed, “up-close” work requiring closer focus than just reading, a monofocal lens in conjunction with eyeglasses may be a better choice for you. If you chose a multifocal IOL, it is possible that not all of the near (and intermediate) focusing ability of your eye will be restored. Additional treatment and/or surgery may be necessary.

Other factors may affect the visual outcome of cataract surgery, including other eye diseases such as glaucoma, diabetic retinopathy, age-related macular degeneration; and your individual healing ability.

**Frequently Asked Questions**

**CAN I WEAR EYE MAKEUP BEFORE SURGERY**
Eye make-up can contain particles and bacteria (particularly eyeliner and mascara) so we stop them one day prior to surgery and week after.

**IF I AM USING EYE MEDICATIONS IN MY EYE TO BE OPERATED ON, DO I STOP TAKING THEM?**
Continue all eye medications through the day before your surgery.

**CAN I TAKE ASPIRIN (or Plavix) BEFORE AND AFTER MY SURGERY?**
Topical anesthesia removes the risk of bleeding behind the eye from local anesthetic injections. So, do not stop any blood thinning medication.

**DO I NEED TO STOP COUMADIN (WARFARIN) BEFORE MY SURGERY?**
Coumadin does not generally need to be stopped prior to cataract surgery. Please have your INR check two weeks before surgery by your primary care doctor. It needs to be less than 3.0

**IF I AM TAKING ORAL MEDICATIONS FOR ANYTHING OTHER THAN MY EYES, DO I NEED TO STOP THEM PRIOR TO SURGERY?**
Use of most medications can be continued preoperatively. Call the surgery center with questions 425-899-5656
Please inform us if you are taking Flomax, but do not stop taking it.

**DO I TAKE MY PILLS ON THE MORNING OF SURGERY? HOW?**
Yes. Take all your usual medications the morning of surgery with a sip of water.
**DO I TAKE MY INSULIN?**
Please call the surgery center with questions regarding this. 425-899-5656

**HOW LONG WILL I BE AT THE SURGERY CENTER THE DAY OF MY SURGERY?**
Even though your operation itself usually takes less than 20 minutes, you should plan to spend 2-3 hours at the Surgery Center. Preparation and post-operative observation and instruction take time. We are committed to providing the finest surgical care and sometimes that takes extra time.

**WHAT CAN I DO WHEN I GO HOME AFTERWARD?**
Take it easy, rest and don’t plan on doing any important paperwork or making any decisions. You’ll probably feel like taking a nap at some point.

**ON THE DAY OF SURGERY, WHAT SHOULD I WEAR?**
Wear a loose shirt or a shirt that buttons in front. Do not wear jewelry.

**WILL SURGERY HURT?**
You will feel pressure and touch during the surgery. You will feel an instrument that helps to keep your eyelids open, but it is unusual for you to feel pain. If you feel pain during the surgery, please let us know and we will make you more comfortable. Most patients are surprised when we tell them “Your surgery is over!” You are typically very relaxed from the sedation we use and may even doze during the operation.

**WILL I BE AWAKE DURING SURGERY?**
You may doze off, but many of our patients are awake and very relaxed for the surgery. Most times, patients recall very little from the actual surgery itself. The effects from the anesthesia are the reason why you must have somebody to drive you home from the surgery.

**HOW DO I KEEP FROM BLINKING DURING THE SURGERY?**
We will gently prop your eyelids open for surgery. If you are awake, your only task is to relax. That will be easy, we’ll be giving you a very pleasant relaxing medication just before surgery.
**DO I SEE MY SURGERY?**
No, all you will see (if you happen to be awake at any point) is a beautiful, random swirl of colors.

**WILL IT HURT AFTERWARD?**
While there is sometimes minor pain after surgery, plain Tylenol nearly always relieves it. If this is ineffective, call our office. It is very common to have some "scratchy" feelings mostly the first day and decreasing after.

**WILL I GET STITCHES?**
Usually no. The vast majority of cataract surgery with us is accomplished with such a small incision that stitches are unnecessary. Just the same, your surgeon will use stitches if it is indicated.

**IS IT LASER SURGERY?**
No. Lasers have not gained widespread acceptance for this use. Cataract surgery uses ultrasound (sound waves) – the current standard in cataract surgical technology – to soften the cataract so it can be vacuumed out through a very small incision. The use of sound waves to soften and remove a cataract is called phacoemulsification.

A laser may be used months or years after cataract surgery for a different purpose. In about 5-15% of patients who have had cataract surgery, a thin film of cloudy tissue develops behind the lens implant. The vision clouds and progressively blurs, causing symptoms very like those of the cataract! Because the symptoms are like the cataract symptoms you had before surgery, this is called "Secondary Cataract." This blurring can be corrected with a simple and painless laser procedure called YAG laser Capsulotomy.

**WHO ADMINISTERS ANESTHESIA?**
For most "Routine" cataract surgeries, board-certified anesthesiologists supervise your anesthesia. For some surgeries, your surgeon and his nurse administer "Conscious Sedation," along with topical or local anesthetics.

**WHAT IF I COUGH?**
If you have chronic respiratory problems, bring your usual medications and inhalers. We can give cough suppressants if we need to. If you have a "cold," and are coughing, call and let us reschedule your surgery!

**HOW DO I TAKE MY POST-OP EYE MEDICATIONS?**
You will receive specific written instructions on the day of surgery. Surgery kits are available for purchase and cost 20 dollars. This includes special sunglasses and some of the medication required after surgery. You will also have a
prescription in the kit for refills if you run out of the drops. You must follow the schedule given to you at the surgery center. Do not stop your drops early.

**SHOULD THE DROPS STING?**
They often do! The initial discomfort will diminish rapidly after the first day. The drops will sting momentarily after you have put them in the eye.

**IS IT NORMAL FOR MY EYES TO FEELS SCRATCHY AFTER SURGERY?**
Expect this the first day, diminishing thereafter. Artificial tears can be soothing. Use them as often as you like.

**WILL I BE WEARING A PATCH AFTER SURGERY?**
Patients do not require an eye patch after surgery. You will have a clear shield that you can take off when you are awake and put back on when going to sleep.

**WHY DO I SEE HALOS THE FIRST FEW DAYS AFTER SURGERY?**
The best lens implants today have special edge treatments to reduce the chance of "Secondary Cataract" formation. This edge often produces a halo effect or arc of light in the peripheral vision for a few days after surgery. For some patients the symptom takes longer (weeks) to resolve, but rarely is a permanent serious problem. Occasionally, under particular lighting conditions, glare may be noticeable permanently but this is rarely bothersome to the patient. Proper corrective glasses with anti-reflective coating are helpful.

**HOW SOON WILL I SEE AFTER SURGERY?**
Vision on the day of surgery is quite variable from one eye to the next, even for the same patient. It is usually blurry in all patients on and off during the first day. You usually experience your best vision after cataract surgery 3-4 weeks post-operatively.

**WILL I NEED GLASSES AFTER SURGERY?**
Many of our patients see very well and function well without glasses. However, all patients must be prepared to wear glasses for optimal vision. Visual needs vary greatly among patients. As a result, our surgeons personalize your surgery and strive for the best surgical result to meet your needs and requirements. If there is a large difference between the glasses required before surgery and the desired goal of your surgery, you may be inconvenienced between the first and second eye surgery because it is hard to please both eyes with very different eyeglass prescriptions. The problem will be resolved when the second eye is done. You may have depth perception problems until your other eye is done so please be careful when stepping off of the curb or going up and down stairs!

**WHEN CAN I RETURN TO WORK?**
This varies among patients. Many patients return to work the following day, although use your judgment.
WHEN CAN I DRIVE AFTER MY SURGERY?
Be prepared to have someone else drive if your vision is not sufficiently clear to drive safely and confidently! Use good judgment, and if you have any question don't drive!

HOW SOON CAN I GO TO THE MOUNTAINS OR RIDE IN AN AIRPLANE?
High altitude and air travel pose no problems after cataract or glaucoma surgery.

WHICH LENS SHOULD I PICK?
We now have the ability to use special lenses if you would like to be more glasses free after surgery. The standard lens used is covered completely by your insurance, however after the surgery please expect to use reading glasses when reading and possibly distance glasses for your best vision.

If you have astigmatism, the TORIC lens will give you better distance vision without glasses, but you will still need reading glasses.

If you want the option to be the most glasses free possible, you could go with the RESTOR/MULTIFOCAL lens. This helps your vision for both distance and reading.

Please visit their website for additional information: www.acrysofrestor.com

DOES MY INSURANCE COVER ANY OF THE MULTIFOCAL OR TORIC LENS?
Yes, your insurance covers a small portion of the cost which is already calculated into the cost for you listed below. Your insurance will not cover the additional cost listed below. They do not cover the additional cost because they consider these special lenses “cosmetic” due to the fact that you can still see with the older style lenses and glasses.

We have not seen any special circumstances under which these lenses have been covered.

WILL MY INSURANCE COVER THE COST OF MY SURGERY?
The cost of the lenses does not affect your medical coverage for surgery. It is best to call the insurance company for the most detailed and up to date information regarding your coverage. Our physician fees are typically $1000.00 for a cataract surgery. The surgery center can be called to ask about the facility fee at 425-899-5656. Most insurance plans have a contract with us so that there is a discounted rate. Your insurance company determines what the final fee is charged to you.

WHAT ARE THE CHARGES FOR THE MULTIFOCAL OR TORIC LENSES?
The charge for the RESTOR/MULTIFOCAL $2500 per eye
The charge for the TORIC lens is $1100 per eye.

All fees are due at the time of surgery.