

Information For Patients Undergoing Cataract Surgery and Implantation of an Intraocular Lens

INTRODUCTION

This information is given to you so that you can make an informed decision about having eye surgery. Take as much time as you need to make your decision about signing this informed consent document. You are being given this document early so that you have ample time to review it. Please have someone read it to you if necessary. You have the right to ask any questions that you might have about the operation before signing it. Your doctor has diagnosed a cataract in one or both of your eyes and feels that you would benefit from cataract surgery. This form does not by itself represent informed consent. Dr. Whitlock always personally reviews what a cataract is, how it is removed, options regarding anesthesia and the risks associated with cataract surgery with each and every patient and any accompanying family members. In addition, if there is anything "out of the ordinary" about your eye, or any unusual or unique risks to your eye, these will be discussed as well.

Except for unusual situations, a cataract operation is indicated only when you cannot function satisfactorily due to decreased vision caused by the cataract. After your doctor has told you that you have a cataract, you and your doctor are the only ones who can determine if or when you should have a cataract operation, based upon your own visual needs and medical considerations. You may decide not to have a cataract operation at this time. If you decide to have an operation, the surgeon will replace your natural lens with an intraocular lens (IOL) in order to restore your vision. This is an artificial lens, usually made of plastic, silicone, or acrylic material, surgically and permanently placed inside the eye. Eye glasses may be required in addition to the IOL for best vision.

INTRAOCULAR LENS BIOMETRY

Your surgeon will take measurements in the office called biometry. Measurements of the length and curvature of the eye are used to calculate the correct IOL power for clear vision. While biometry is very accurate in the majority of patients, the final result may be different from what was planned. As the eye heals, the IOL can shift very slightly toward the front or the back of the eye in an unpredictable way. The amount of this shift is not the same in everyone, and it may cause different vision than predicted. 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. If the eye's visual power after surgery is considerably different than what was planned, and you are troubled by this, surgical replacement of the IOL might be considered. It is usually possible to replace the IOL and improve the situation, if done early after the initial surgery.

You must understand that while nearly all people see a huge improvement after cataract surgery, glasses are still needed to see maximally at all distances. The man-made lens inserted at the end of your cataract surgery is not as good as a 21-year-old's natural lens.

Often, bifocals are still needed. Furthermore, astigmatism, where the eyeball is not round but oval, is not always fully corrected with cataract surgery and may cause blurred vision even after a very successful operation. Your surgeon will alert you if you have significant corneal astigmatism that may limit your uncorrected visual acuity after surgery.

MONOVISION

Monovision in the setting of cataract surgery refers to aiming one eye for distance and the other eye for near vision. Monovision can unfortunately impair depth perception to some extent because the eyes are not focused together at the same distance, but the advantage of monovision is that of reduced spectacle dependence. Because monovision can reduce optimum depth perception, it is typically recommended that this option be tried with contact lenses (which are removable) prior to contemplating monovision correction involving two IOLs. If the cataracts are severe, this "previewing" option may not work because of the blurred vision. Dr. Whitlock usually only recommends monovision if you have used and enjoyed monovision in the past. **Under no circumstances should you consider undertaking cataract surgery with monovision correction before you are convinced it will be right for you.** Once surgery is performed, it is not always possible to undo what is done, or to reverse the distance and near eye without some loss of visual quality.

ANESTHESIA, PROCEDURE, AND POSTOPERATIVE CARE

In most cases, Dr. Whitlock uses numbing jelly applied to the surface of the eye to prevent pain during cataract surgery. In unusual and difficult cases, or when patients prefer, a numbing injection called local anesthesia can be used instead. You may also undergo light sedation administered by an anesthesiologist or nurse anesthetist.

A small incision, or opening, is then made in the eye that is about 2.8 millimeters long. This is many times "self-sealing" at the end of surgery but it may require closure with a very fine stitch (suture). Through this incision, the natural lens in your eye will then be removed by a type of surgery called phacoemulsification, which uses a vibrating probe to break the lens up into small pieces (many people erroneously believe this part of the surgery is performed by laser). These pieces are gently suctioned out of your eye. After your natural lens is removed, the IOL is placed inside your eye. Your surgeon will show you pictures of how this is done.

After the surgery, your eye will be examined the next day, and then at intervals determined by your surgeon. During the recovery period, you will place drops in your eyes for about 4 to 6 weeks, depending on your individual rate of healing. You should be able to resume your normal activities within 1 or 2 days with some light restrictions for the first week. Even if you have chosen monovision, glasses may still be required either for further improvement in your distance vision, reading vision, or both. When your eye heals and is stable (usually within 4 to 6 weeks), glasses or contact lenses can then be prescribed.

RISKS OF CATARACT SURGERY

The goal of cataract surgery is to correct the decreased vision that was caused by the cataract. Cataract surgery will not correct other causes of decreased vision, such as glaucoma, diabetes, or age-related macular degeneration. Cataract surgery is usually quite comfortable. Mild discomfort for the first 24 hours is not uncommon, but severe pain would be extremely unusual and should be reported immediately to the surgeon.

As a result of the surgery and 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 very rare situations. Depending upon the type of anesthesia, other risks are possible, including cardiac and respiratory problems, and, in exceedingly rare cases, death. Although any of these complications can occur, their incidence during or following cataract surgery is fortunately quite low. **In fact, patients experience vision-threatening complications quite infrequently**, but they are not impossible and often not predictable or even associated with surgeon error. Many patients believe that cataract surgery is completely risk-free and it is imperative that you understand the reality of the risks below.

Risks of cataract surgery include, but are not limited to:

1. 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 lens of the eye (corneal edema), which can be corrected with a corneal transplant;
 - swelling in the central area of the retina (called cystoid macular edema), which usually improves with time;
 - retained pieces of lens in the eye, which may need to be removed surgically;
 - infection;
 - detachment of the retina, which is definitely an increased risk for highly nearsighted patients, but which can usually be repaired;
 - uncomfortable or painful eye; droopy eyelid;
 - increased astigmatism;
 - glaucoma; 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 very rare situations. **Additional surgery may be required to treat these complications.**
2. Complications associated with the IOL may include increased night glare and/or halo, double or ghost images, and dislocation of the IOL. In some instances, corrective lenses or surgical replacement of the IOL may be necessary for adequate visual function following cataract surgery.
3. Complications associated with local anesthesia injections around the eye include perforation of the eye, destruction of the optic nerve, interference with the circulation

of the retina, droopy eyelid, respiratory depression, hypotension, cardiac problems, and in rare situations, brain damage or death. When Dr. Whitlock uses only the numbing jelly, the risks of these complications are completely avoided.

4. Complications associated with monovision. Monovision may result in problems with impaired depth perception. Choosing the wrong eye for distance correction may result in feeling that things are the “wrong way around.” Once surgery is performed, it is not always possible to undo what is done, or to reverse the distance and near eye without some loss of visual quality.
5. Floaters -- Not truly a complication of cataract surgery, but frequently perceived to be, floaters are a common occurrence in an aging eye. Floaters are very common in eyes that have never had cataract surgery. Sometimes however, an eye that does not have floaters will develop floaters after cataract surgery. Although annoying, they are usually harmless but should still be mentioned to your ophthalmologist so that a retinal exam can be performed to rule out a retinal tear or detachment.
6. If complications occur at the time of surgery, the doctor may decide not to implant an IOL in your eye even though you may have given prior permission to do so. (very rare)
7. Other factors may affect the visual outcome of cataract surgery, including other eye diseases such as glaucoma, diabetic retinopathy, age-related macular degeneration; the power of the IOL; and your individual healing ability. Limitations imposed by these other diseases on your vision will not be corrected by cataract surgery.
8. The selection of the proper IOL, while based upon sophisticated equipment and computer formulas, is not an exact science. As explained above, after your eye heals, its visual power may be different from what was predicted by preoperative testing. You may need to wear glasses or contact lenses after surgery to obtain your best vision. Additional surgeries such as IOL exchange, placement of an additional IOL, or refractive laser surgery may be needed if you are not satisfied with your vision after cataract surgery. (This is usually **not** covered by insurance companies.)
9. If your ophthalmologist has informed you that you have a high degree of hyperopia (farsightedness) and/or that the axial length of your eye is short, 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.
10. If your ophthalmologist has informed you that you have a high degree of myopia (nearsightedness) and/or that the axial length of your eye is long, your risk for a complication called a retinal detachment is increased. Retinal detachments can usually be repaired but may lead to vision loss or blindness.
11. Since only one eye will undergo surgery at a time, you may experience a period of imbalance between the two eyes (anisometropia). Because of the difference between the eyes, this occasionally cannot be corrected with spectacle glasses. If this occurs, you will either temporarily have to wear a contact lens in the non-operated eye or will function with only one clear eye for distance vision. In the absence of complications, surgery in the second eye can usually be accomplished within 1 to 4 weeks, once the first eye has stabilized.

PATIENT CONSENT

Cataract surgery, by itself, means the removal of the natural lens of the eye by a surgical

technique. In order for an IOL to be implanted in my eye, I understand I must have cataract surgery performed either at the time of the IOL implantation or before IOL implantation. If my cataract was previously removed, I have been informed that my eye is medically acceptable for IOL implantation.

The basic procedures of cataract surgery, and the advantages and disadvantages, risks, and possible complications of this and alternative treatments have been explained to me by my ophthalmologist. If I was interested, monovision has been discussed with me at my request. Although it is impossible for the doctor to inform me of every possible complication that may occur, the doctor has answered all my questions to my satisfaction.

In signing this informed consent for cataract operation and/or implantation of an IOL, I am stating that I have been offered a copy prior to this day, I fully understand the possible risks, benefits, and complications of cataract surgery and

- I have read this informed consent _____ (**patient initials**)
- Dr. Whitlock has personally reviewed with me using his picture book the risks, benefits, and
details specific to my surgery _____ (**patient initials**)
- The discussion with Dr. Whitlock was witnessed by _____
(**friend or family member's name**)

(-or if necessary-)

- The consent form was read to me by _____ (**name**).

Patient (or person authorized to sign for patient)

Date

Physician Signature

Date