



Co-Management Manual

LASIK

Frequently Asked Questions

Pre-Op

1

What is the prescription range for LASIK?

- LASIK correction can safely treat from +4.00 to -8.00 diopters of spherical correction and up to -6.00 diopters of astigmatic correction.



2

How thick does the cornea need to be?

- The corneal thickness necessary for a LASIK procedure is dependent on a patient's prescription and the estimated residual stromal bed tissue. Quick calculations can be done to better understand if your patient is a good LASIK candidate. To calculate, subtract the flap thickness (110-100 um) and epilated corneal tissue (17 um per diopter) from the measured corneal thickness. After the calculation, if the residual stromal bed is equal to or greater than 300um it is safe to perform LASIK.
- For example, a corneal thickness over 550 um can accommodate up to a -8.00 diopter prescription. However, the patient needs to be educated on the risk of corneal ectasia. ICL should also be presented as an option in this case. See calculations below.
 - o Original corneal thickness = 550 um
 - o Flap thickness = 110 um
 - o Epilated corneal tissue = $17 \times 8.00 = 136$ um
 - o Residual corneal tissue after LASIK = 304 um



3

Prior Lasik patients – can they have surgery again?

- Potentially, each case must be individually evaluated. The flap created for LASIK vision correction can be re-lifted up to 2 years after the original surgery date. If a regression occurs over this time, a relift and enhancement is possible. If the patient is more than 2 years out from their surgery date, PRK may be a better option.



4

What type of dilating drop should be used for the Lasik pre-op?

- Tropicamide can be used for the LASIK pre-op wet refraction. Please remember to wait a minimum of 20 minutes to ensure the dilating drops are in full effect.



5

How long should a patient be out of contact lenses?

- Patients should be out of their contact lenses prior to surgery. For soft contact lenses, patient should be out of their contacts 2-3 days prior to surgery. For toric or overnight soft contact lenses, patient should be out of their contacts 5-7 days prior to surgery. For patients who wear rigid gas permeable or scleral lenses, patient should be out of their contact lenses 2 weeks prior to surgery.

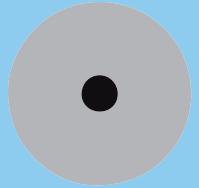


Post-Op

1

DLK – How to diagnose?

- Diffuse lamellar keratitis typically presents 1 to 2 days after LASIK. While DLK is a rare, noninfectious inflammatory reaction, early intervention can lead to a better prognosis. DLK is characterized by white, grainy cells underneath the LASIK flap. Patients may also complain of pain, light sensitivity, blurry vision and foreign body sensation.
- If you are unsure of a DLK diagnosis, please refer the patient back to DLV for a secondary evaluation.



2

When to refer a patient back?

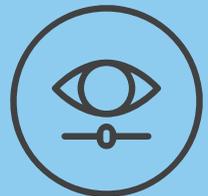
- If you ever feel uncomfortable managing a post-operative LASIK patient, you are always welcome to refer back to DLV. You can also reach out directly to any of our doctors by text, phone or email.
- Referrals back to DLV can include, but are not limited to: an unexplained decrease in VA (unable to refract to 20/20), diagnosis of DLK, uncontrolled dryness (failed artificial tears/plugs), epi ingrowths on the visual axis, epi ingrowths off the visual axis >1.5mm, macrostriae, etc.



3

At what point should I refer back if there is a residual prescription?

- If a patient has a residual prescription, they should be referred back to DLV 1) when the residual prescription is stable and 2) after 3 months from surgery date. Depending on the severity of over/under correction, a patient may request temporary glasses or contact lenses.



CATARACT

Frequently Asked Questions

Pre-Op

1

What should I do to improve ocular surface disease prior to surgery?

- Management of the ocular surface is critical for good post-operative results.
- Artificial tears can be started prior to cataract surgery to prime the front surface. Lid scrubs and warm compresses may also be advisable depending on clinical findings.



2

What drops to use when optimizing ocular surface?

- Artificial tear drops include: Refresh, Systane, Blink, Thera tears.



3

When should MIGS be discussed if a patient is on glaucoma medications?

- A general conversation should occur during your exam, and prior to the cataract evaluation with DLV. MIGS are targeted for mild to moderate glaucoma patients. A surgical consultation with our glaucoma specialist, Dr. Vosoghi, may be advised in order to determine if treatment via MIGS applies to your patient.



4

When should retinal clearance be considered?

- Individuals at higher risk of retinal detachments or tears should be referred to a retinal specialist for cataract surgery clearance. These patients include: high myopia (> -6.00 diopters), history of retinal tears, history of detachments, history of vitrectomy, extensive lattice, retinoschisis, high axial length, or diabetic retinopathy.



5

Use of multifocal vs monofocal contact lenses.

- Depending on your patient's visual goals, they may be referred back to your office in order to trial monovision or multifocal lenses. If your patient is already wearing monovision or multifocal contact lenses, please include the contact lens prescription in your referral.

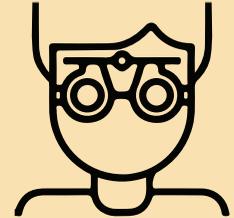


Post-Op

1

What should I look out for when my patient has an IOP spike?

- All patients, at the one-day appointment, should have their IOP measured to ensure no wound leaks are present and that the IOP is within a normal range. The pressure is expected to be slightly higher than average directly after surgery. A good scan of the anterior chamber should also be completed to rule out retained lens fragments.
- General IOP Guidelines:
 - o Patients with a pressure below 27 can be monitored without glaucoma drop intervention.
 - o A pressure spike between 28-34mmHg should have a glaucoma drop prescribed to ensure patient comfort. Consider lowering IOP in office if above 30mmHg.
 - o A pressure spike 35mmHg or greater should be referred directly back to DLV for paracentesis.



2

What prescription should I use and how frequently?

- Glaucoma drop preference is doctor dependent. The following drops may be prescribed: *alphagan p*, *azopt*, *timolol*, *combigan*, or *simbrinza*. However, before prescribing a glaucoma medication, contraindications should be reviewed with the patient. Most typically, patients will use the glaucoma drop for 1 week before discontinuing.
- Recommended dosing frequency:
 - o Alpha-2-agonist: TID
 - o Beta blocker: BID
 - o CAI: TID
- Contraindications to review with patients:
 - o Alphagan – previous allergic reaction/sensitivity
 - o Beta blockers – heart or lung issues (asthma/COPD), low heart rate
 - o CAI – sulfa allergies



3

Should I change post-op management if my patient has a lot of corneal edema?

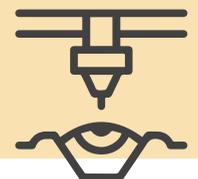
- Depending on the visual acuity and corneal edema at the one-day post op appointment, it may be appropriate to adjust the drop scheduled. For instance, if a patient has a visual acuity of 20/200 or 20/100 with 2-3+ corneal fold, it would be appropriate to increase the steroid to q2hrs. The vision is expected to improve over the next week.



4

Enhancements and when to refer the patient back?

- Referrals for enhancements should be sent after 90 days. The patient should be followed appropriately to ensure stability of prescription. Depending on the patient's prescription, ocular state, and topography the appropriate enhancement will be determined.



5

When to send back for a YAG capsulotomy?

- The earliest a YAG capsulotomy can be performed is 90 days after cataract surgery. Please make sure the patient is out of their global period before referring for a YAG eval. If YAG is performed early, it can potentially cause cystoid macular edema.

THANK YOU FOR ALLOWING US TO PARTICIPATE IN THE CARE OF YOUR PATIENTS.

The purpose of our co-management guidebook is to provide you with all of the necessary information to ensure that together we provide the best care possible for your patients. Inside you will find information for pre and post-operative care for all of your procedures, information on procedures and services we offer, as well as tips and pointers for managing surgery patients.

NOTE FROM THE SURGEONS

Today is an exciting time in vision correction surgery. Tremendous advances have been made in refractive and cataract surgery. With more options available than ever before a greater number of people can reduce their dependence on glasses and expect better vision after cataract surgery. With that being said, it is important to give proper advice on which treatment option is best for your patients' specific needs. My goal is to provide patients with the best possible experience while having the safest and most effective surgical outcome their eyes are capable of achieving. We treat every pair of eyes like they are our own. My staff and I work as hard as possible to provide the patients with the best quality of care possible.

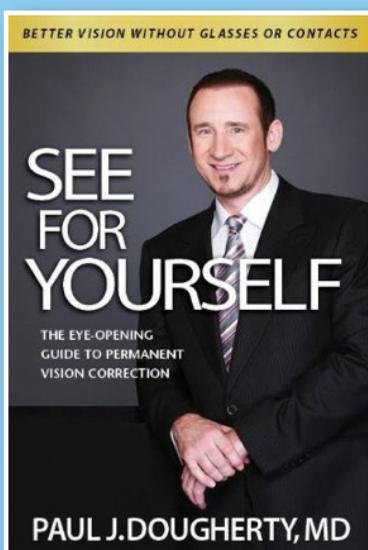
With the ability to customize treatments using both lens and laser based options, patient are achieving quality vision that many surgeons, who do not use LASIK and lens surgery together, are not able to accomplish. For us, the most exciting aspect of cataract surgery is improving the quality of life our patients! We look forward to working with each of you individually. Thank you!

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DLV VISION IS PROUD TO OFFER:

- SMILE / LASIK/ PRK
- Implantable Contact Lens (ICL)
- Cataract Surgery / Refractive Lens Exchange (RLE)
- Cross-Linking (CXL)
- Intacs
- SLT / LPI
- Incisional Glaucoma Surgery
- Glaucoma Tips / Treatment

“Excellence in Vision-*Dougherty Laser Vision* will be unsurpassed in our strive for excellence and provide inspiring inner and outer vision for our patients, referring providers, employees, and our world.”

DLV Vision and ADV Vision have no written or unwritten policy with referring Optometrist covering the co-managing of its patients. DLV and ADV realize that there is no one formula and each patient has unique needs. Optometrist must independently determine if co-management is appropriate for each individual patient, it must be assessed on a case by case basis and not in a blanket or routine manner.

CO-MANAGEMENT OF CATARACT PATIENTS

Policy and Procedure Manual

INTRODUCTION

Patients choosing co-management for their pre and post-operative surgical care experience the benefits of continuity of care by their Primary Eye Care Provider (PECP) as well as geographical convenience. This manual outlines the process that Dougherty Laser Vision (DLV) follows for the co-management of cataract/IOL surgery as well as other vision correction surgeries. Together with our co-managing doctors, we will provide the highest quality of care for our shared patients, consistent with patient needs and desires. DLV is pleased to offer primary eye care providers an opportunity to participate in the pre and post-operative portions of the surgical process. These guidelines comply with applicable state and federal statutes and regulations regarding co-management of patient care and referral arrangements.

1. The selection of an operating surgeon for patient referral will be based on providing the best potential outcome for the patient. Financial relationships between providers will not be a factor.
2. The patient's right to choose the method of post-operative care will be recognized and will be consistent with the best medical interest of the patient.
3. Co-managing doctors will be licensed ODs or MDs.
4. The transfer of post-operative care will always be clinically appropriate and depend on the particular facts and circumstances of the surgical event.
5. Following surgery, transfer of care from the operating surgeon to the co-managing provider will occur when clinically appropriate at a mutually agreed upon time or circumstance, and such time will be clearly documented via correspondence and included in the patient's medical record.
6. DLV and the co-managing provider will communicate during the post-operative period to assure the best possible outcome for the patient.
7. Compensation for care will be commensurate with the services provided. Cases involving care for Medicare beneficiaries will reflect the proper use of modifiers and other Medicare billing instructions.

Step-by-step instructions and co-management forms are provided in the following sections of this manual.

STEP-BY-STEP PROCESS FOR CATARACT CO-MANAGEMENT

Patient is seen by his/her Primary Eye Care Provider (PECP or OD) and charged the usual and customary fee for a complete examination. The doctor identifies the patient need for cataract surgery and completes the Pre-Op Examination and Consultation Request Form.

1. The referring optometrist educates the patient regarding the process of cataract surgery.
2. The referring optometrist discusses the typical co-management treatment plan and explains what care will be provided by DLV and the optometrist. The referring optometrist sends the Pre-Op Exam to DLV.
3. The patient may be scheduled for an appointment at DLV by the referring optometrist's office, DLV calling the patient after receiving the request form, or the patient calling DLV at their convenience.
4. The patient is examined at DLV and a determination of medical necessity for cataract surgery is made. The patient is educated on which procedure best suits the patient's needs.
5. The patient is scheduled for surgery if necessary. DLV will provide educational materials on the procedure; give the patient instructions related to post-op care, and information regarding fees. The patient will complete and sign an Informed Consent and any other necessary forms. If the patient desires to have post-surgical care co-managed, the patient will sign the Co-Management Consent Form.
6. DLV will complete a letter reviewing the patient's visit and then fax the completed form to the co-managing eye care provider advising the plan for treatment and any other remarkable findings.
7. When deemed medically appropriate, typically at 24 hours after surgery, DLV completes the Transfer of Care Form and Surgery Report which includes surgery information and findings as well as post operative visits if appropriate.
8. Following each post-operative visit, the co-managing PECP will fax a post-operative co-management exam form to DLV.
9. Upon completion of post-operative care, the PECP will submit the appropriate claim to third party payers or prepare patient billing for their portion of the post-operative treatment. The PECP should be a participating provider with Medicare and will bill and be paid directly by Medicare. If you are a Medicare provider, DLV can refer you to a medical billing service to assist you with billing Medicare for the co-managed portion of your care.

We look forward to a partnership with our affiliated co-managing doctors in which we can offer our cataract and lens implant patients the best and most convenient care!

CATARACT PATIENT CO-MANAGEMENT TREATMENT PLAN

WHAT IS FOLLOW-UP CARE?

After your cataract surgery, you will have several appointments with an eye care professional. You should understand that complications may not necessarily occur during surgery, but may occur after the surgery has been performed. For this reason, it is imperative that you have appropriate care by a qualified eye care professional following your surgery. He or she will perform tests to measure your visual acuity and, ultimately, if necessary, fit you for eyeglasses. In addition, your doctor will ensure that any post-surgery complications are detected and treated. This series of visits is called your “follow-up care.”

WHO IS QUALIFIED TO PROVIDE FOLLOW-UP CARE?

It is critical that your follow-up care be performed by a qualified eye care professional familiar with your case. Several different practitioners are qualified to provide this service. You should understand the roles that each may play in your recovery.

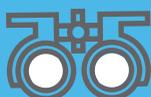


Your Surgeon

Your surgeon is a licensed ophthalmologist, a medical doctor who specializes in ocular surgery. Your surgeon or his associate will also determine when you can be released from his or her care to return to your optometrist for further follow-up visits.

Your Surgeon or His Associate

will also determine when you can be released from his or her care to return to your optometrist for further follow-up visits.



Your Optometrist

Most patients will return to see their PECP for their post surgical care. Your optometrist is also the vision specialist who will examine and fit you for your glasses, if necessary, after recovery. Your optometrist will be in communication with DLV following each post-operative visit. If problems develop during the post-surgery follow-up period, your optometrist and your surgeon will communicate regarding your care until these have resolved.



Another PECP

If you travel away from home to have surgery and wish to return home soon after surgery, or if you have any other personal reason for not receiving your follow-up care from your surgeon or optometrist, you may decide to see another eye care provider for your follow-up care. We will make arrangements with another provider if you are unable to do your follow up visits with the surgery center or your PECP.

SUMMARY

We hope this summary has helped to explain some facts about the cataract surgical process. Your optometrist and surgeon will explain the improvements in your vision that you may enjoy after cataract surgery. If you have any questions or concerns, now is the time to raise them. You may contact your optometrist or DLV at any time, before or after surgery, to answer your questions or address concerns.

TREATMENT PROTOCOLS

The volume of cataract surgeries will continue to increase as the population ages. So, we must stay educated in cataract surgery protocols and possible complications. A thorough pre-op exam and treatment of any existing problems may prevent complications from occurring after surgery. Though serious complications are rare, it is also important to know what post-op complications can occur and how you can manage them, and when it is time to refer the patient back to the surgeon.

PRE-OP EXAM

General Health

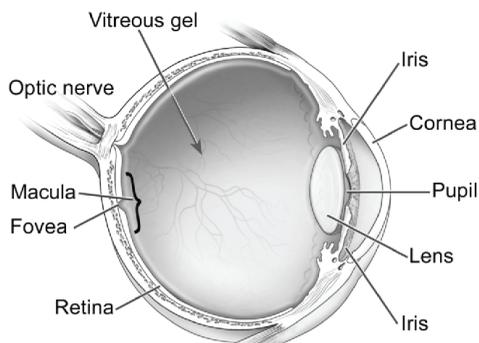
The first key to managing complications is to find ways to avoid them altogether or at least decrease their likelihood. This starts with astute observations during your pre-operative exam, and that starts with a general health history. Understanding the patient's overall health at the time of surgery can help chart the strategy of the procedure. It can also help predict and explain the prognosis and course of recovery.

Ask about systemic diseases that affect healing after cataract surgery, particularly **autoimmune diseases such as such as rheumatoid arthritis, collagen vascular and metabolic diseases, lupus and diabetes**. Patients with rheumatoid arthritis are at risk for abnormal healing/melting of the corneal incision. Examine the patient's hands for telltale signs of disfigured digits. Lupus or other autoimmune diseases may increase the inflammatory response after surgery, resulting in pronounced post-op inflammation, high intraocular pressure, cystoid macular edema or even a corneal melt near the incision.

If the history is positive for any of these diseases, you have some options to help provide that patient with a normal post-op healing course. The surgeon could consider more inert intraocular lenses (IOLs) made of acrylic instead of silicone, which would reduce a potential source of inflammation. Be prepared for the need to increase the steroid dosing early in the post-op period to control the ensuing inflammatory response. If the autoimmune disease is active, we recommend referring the patient to their rheumatologist prior to surgery for treatment and clearance.

There are some concerns specific to diabetic patients: poor wound healing, and the risk exacerbating existing proliferative retinopathy and diabetic macular edema. **Diabetics** with poor blood sugar control may have a slower recovery following surgery. Some may benefit from delaying surgery until their diabetes is under control. Diabetics often have denser cataracts and may be more prone to corneal edema and early IOP spikes after surgery.

Another important systemic issue in cataract surgery is the use of prostate medication in males. Use of these medications (Flomax/Tamsulosin, Cardura/Doxazosin, Saw Palmetto), increase the risk of intraoperative floppy iris syndrome (IFIS) that can lead to damage to the iris or increased corneal edema. Stopping these medications does not reduce the risk. Please inform the surgeon prior to surgery if your patient is on one of these medications to allow the surgeon to prepare to prevent IFIS with intraoperative iris rings and epinephrine.



Anterior Segment Concerns

Examination of the eyelids prior to surgery should not be overlooked. The leading cause of endophthalmitis is the introduction of bacteria into the eye from the conjunctiva and ocular adnexa. It's important to diagnose and manage **blepharitis/meibomitis** prior to cataract surgery. Also, look for other lid conditions such as entropion, **ectropion and lower lid laxity** which can negatively impact healing and dry eye. Improper apposition of the lower eyelid can contribute to an inadequate clearing of bacteria, which

also increases the risk of endophthalmitis. Patients with cranial nerve dysfunction such as a seventh-nerve palsy, which results in an incomplete blink, are also at risk for corneal exposure problems and poor wound healing after cataract surgery. Lubricating ointments and a referral for surgical intervention may be indicated for these patients.

Pterygia, epithelial basement membrane dystrophy, Salzmann's nodular dystrophy or band keratopathy can prevent accurate measurements and limit vision. To accurately assess the cornea for proper IOL power calculations, crisp and regular mires on the keratometer or topographer are essential. Discuss this with the patient prior to surgery to help manage post-op visual expectations. These patients may benefit from corrective surgery or aggressive treatment of the ocular surface with drops (ie Restasis, Xiidra, cyclosporine, steroids, tears and ointments, Vitamin A ointment) prior to the cataract procedure, which would provide for better corneal measurements and improved corneal transparency. **Epithelial Basement Membrane Dystrophy** is extremely common and frequently missed on exam. EBMD can lead to an increased risk of epithelial defects or edema following surgery, which can slow vision recovery and require a bandage contact lens.

Two additional corneal conditions to consider in counseling patients:

- **Fuchs' dystrophy.** Patients with moderate to advanced Fuchs' are at risk of permanent corneal edema requiring corneal transplantation due to the strain that cataract surgery can put on already debilitated endothelial cells. With patients with Fuchs dystrophy, it is important to discuss prolonged recovery and blurry vision after surgery. Fuchs dystrophy have the possibility of increased corneal edema after surgery. Discuss use of viscoelastic during surgery to decrease risk of edema.
- **Herpes simplex keratitis.** The Herpetic Eye Disease Study (HEDS) and other studies have shown that previous episodes of herpes simplex stromal keratitis are the single greatest contributing factor to subsequent bouts of recurrence. Trauma may also trigger recurrence. Because surgery involves some trauma to the eye, the surgeon may consider treating these patients prophylactically with oral and/or topical antivirals before and after surgery. Cataract surgery may be contraindicated if an episode of HSV keratitis has occurred within the last 6-12 months.

ADDITIONAL PRE-OP CONCERNS

Counsel patients with conditions which can result in weak zonular fibers and, in turn, increase the risk of a capsular rupture or tear. These include **Marfan's syndrome, Ehlers-Danlos syndrome, previous trauma and pseudoexfoliation (PXF)**. Patients with a traumatic cataract secondary to an impact injury are at heightened risk of capsular rupture potential. Pseudoexfoliation is the most common of these conditions. The surgeon will usually be prepared for potentially suturing the IOL in place or consider using a capsular tension ring, which might aid in centration of the IOL within the capsular bag. PXF also places the patient at higher risk for an IOP spike after surgery.

Also perform a thorough dilated fundus examination to identify any pathology that may limit best visual acuity postoperatively or contribute to retinal tears or detachments following surgery. Consider referring patients with peripheral areas of weakness for prophylactic treatment by a retina surgeon prior to cataract surgery. Warn patients with a history of toxoplasmosis or histoplasmosis of the risk that the conditions could reactivate following cataract extraction. Also, look carefully for the presence of epi-retinal membranes that can limit vision after surgery and can increase the risk of CME requiring pre-operative NSAID use.

POST-OP VISITS

During these visits you need to assess the early stages of recovery and rule out any serious problems. Most complications after cataract surgery present early in the post-op period and will be resolved by the time the patient is released by the surgeon. Review the post-op

medication regimen that is prescribed, confirm compliance and clarify any questions the patient may have about his or her recovery. A post-op kit and instructions will have been provided to the patient.

DROPLESS CATARACT SURGERY

DLV is happy to provide the convenience and cost effective new technology of dropleless cataract surgery. The drug is formulated at a compounding pharmacy under strict regulations. Before closing the eye after cataract surgery a formulation containing antibiotics and steroids is injected into the patient's anterior vitreous. This injection will take the place of post-operative drops. Dropleless cataract surgery has shown to decrease incidence of endophthalmitis and CME. There may be certain patients that need to supplement the injection with topical drops. These patients include diabetics, ERM, patients with increased corneal edema following surgery or patients with breakthrough inflammation. Certain patients, due to anatomic issues of the capsule that cannot be diagnosed prior to surgery, are not candidates for the Dropleless injection. For the first few days following surgery you may notice a faint white cloud on slit lamp examination and the patient may complain of a hazy vision and/or peripheral floaters. This is a normal finding which is caused by the injection settling down. DLV will communicate if a patient has undergone dropleless cataract surgery.

KEY EXAM AREAS

During your post-op exams, pay careful attention to these key areas:

Visual Acuity. It is not unusual for the patient to have reasonably good acuity immediately post-op. More dense and cataracts (usually seen in older patients), however, can often result in a delayed return of acuity. This is due to corneal edema from the higher levels of phaco energy used during the procedure. Increased levels of corneal edema are much more common in patients with corneal guttata or Fuch's dystrophy. Corneal edema, in fact, is the most common cause of decreased vision on day one post-op and should not be a cause for alarm – this is most common issue will see after surgery. Please reassure that patient that this will clear over a few days or weeks.

Given the variety of correction strategies available, including monovision corrections and multifocal IOLs, you should know what corrective strategy or targeted refraction the patient chose before you examine the patient.

The Incision. Carefully inspect the incision for any evidence of poor healing or a wound leak. Signs associated with this problem are a shallow anterior chamber, an IOP of less than 5 mmHg, and some degree of corneal edema. A Seidel's test with fluorescein can help you verify a wound leak. Wound leaks are a serious issue. Not only do they delay visual recovery, but they put the patient at risk of intraocular infection or choroidal hemorrhaging due to the low IOP. Wound leaks require consultation with the surgeon. Significant wound leaks may require suturing for repair, while smaller leaks can usually be controlled by temporarily reducing the steroid medication and applying a bandage contact lens for a few days.

Corneal Integrity. Assessment of the cornea's overall status can help you anticipate when the patient will recover best visual acuity. Stromal and epithelial herpetic keratitis can recur after cataract surgery. Cataract surgery may be contraindicated if an episode of HSV keratitis has occurred within the last 6-12 months. Depending on the difficulty and length of the surgery, the cornea can respond with varying degrees of edema and endothelial folds. In an uncompromised cornea, swelling will limit vision early on, but this tends to dissipate within the first week post-op, resulting in improved acuity. Patients with compromised corneal endothelial cell function or Fuchs' dystrophy can expect corneal edema to diminish more slowly, but they still tend to do well long-term. Whenever you note significant corneal

edema, be sure to consider IOP. A cloudy cornea with signs of microcystic edema is often a sign of elevated IOP following cataract surgery. Though rare, corneal abrasions can develop immediately following cataract surgery. We can usually resolve this problem with a bandage contact lens for one or two days. Also, we can temporarily decrease steroid usage to allow for improved epithelial migration; this can help the abrasion resolve quickly.

Anterior Chamber Status. At day one the anterior chamber should appear well formed with moderate cellular reaction. A flat or shallow chamber may indicate a wound leak. The cellular reaction can be more pronounced in difficult cases, but fibrin within the anterior chamber or the presence of hypopyon is never normal. A dense anterior chamber reaction with visual obscuration of the anterior segment anatomy indicates bacterial endophthalmitis, which requires immediate attention and culturing.

IOL Status Within the Capsular Bag. IOL decentration/dislocation is not common with uncomplicated surgery but does occur. Most IOL dislocations result from trauma, known zonular weakness or in association with a tear in the posterior or anterior capsule.

Dislocations often occur months to years after the original procedure, but may be seen the next day. Review any evidence of IOL dislocation with DLV. The surgeon may need to explant the IOL and then place it within the ciliary sulcus, or suture the implant in place. Besides examining the implant location, carefully inspect the integrity of the capsular bag. Early wrinkles within the posterior capsule can cause minor visual distortion or streaking of lights. Fortunately, these tend to fade throughout the early post-operative period as the capsule shrinks. In cases of posterior subcapsular cataracts, it is not uncommon to have early post-operative opacification of the posterior capsule until YAG laser can be performed at 3 months after surgery. This is due to a higher degree of remaining lens epithelial cells that adhere to the posterior capsule after surgery.

Keep in mind, however, that YAG procedures carry a short-term risk of an immediate IOP spike. You can usually control this with topical IOP-lowering agents in conjunction with a short course of topical steroids. Historically, alpha agonists have proven to work well with anterior laser surgery. YAG laser capsulotomy also carries a slight long-term risk of retinal tear or detachment. So, it is important to monitor the patients after treatment. Several research studies are investigating different IOL designs and materials that will hopefully reduce the incidence of posterior capsule opacification. Posterior capsule rupture has been cited in up to 4.1% of all cataract surgeries. Tears of the posterior capsule that occur during surgery require special care to prevent loss of lens fragments within the eye. Evidence of free lens fragments postoperatively should be referred back to the surgeon. These loose particles can lead to chronic inflammation and IOP elevation, and thus need to be dealt with carefully.

Intraocular Pressure. IOP spikes in the immediate post-op period occur in 5-14% of all cataract surgeries, regardless of technique. Several studies have linked the viscoelastic substance used to fill the anterior chamber with the incidence of a 24-hour post-op pressure spike. While the surgeon makes every attempt to remove the viscoelastic, complete removal is nearly impossible.

Patients who present with pressures higher than 30mm Hg may complain of a dull headache or pain in and around the eye. A steamy cornea that indicates diffuse microcystic edema typically manifests with pressures at or above this level. You may need to refer this patient back to DLV for an anterior chamber tap through the paracentesis to immediately reduce IOP if the IOP is above 35 or the patient is symptomatic. If the anterior chamber tap is not an option, you can prescribe a topical pressure-lowering agent such as a beta-blocker, an alpha adrenergic agonist or a carbonic anhydrase inhibitor--either alone or in combination--to reduce the pressure. (Of course, beta blockers are contraindicated in patients with any

history of respiratory problems or slow heart rate). Once IOP is within normal limits, recheck the patient in 24-48 hours to rule out a rebound spike. Typically, IOP will have stabilized at the one-week visit, and it will be safe to discontinue the pressure-lowering drops.

SERIOUS COMPLICATIONS

Some of the more serious though less frequent complications associated with cataract surgery include:

Endophthalmitis. This bacterial intraocular infection occurs in about 0.05-0.7% of cataract surgeries. The usual source of infection is the patient's own ocular surface, and most cultures are gram-positive organisms at work. Although rare, endophthalmitis is the biggest we face. Early diagnosis and treatment is critical. Without prompt treatment, the patient could lose an eye. A patient with endophthalmitis presents with a red, photophobic eye, usually within a few days after surgery. One important symptom is the presence of unusual pain and blurred vision early in the post-op period. Upon slit-lamp examination there will be a marked anterior chamber reaction with possible fibrin and hypopyon. Refer patients back to the surgeon immediately for intraocular culturing, intraocular antibiotics and possible vitrectomy.

Cystoid Macular Edema (CME) often presents with unexplained decreased acuity within the first few weeks or months after surgery. At times, it can present nearly a month after surgery and persist for several months before it spontaneously resolves. CME may be difficult to detect on fundus examination alone. Therefore decreased visual acuity without other explanation should warrant an OCT. CME is treated by increasing steroid and NSAID drops.

Retinal Detachment. The likelihood of retinal detachment after uncomplicated cataract surgery is less than 1%. Complicated cases involving posterior capsule rupture and vitreous loss increase the likelihood of retinal problems after surgery. The incidence does rise in highly myopic eyes – particularly males and patients with a family history, necessitating detailed retinal examination and prophylactic treatment of lesions that could contribute to a retinal detachment.

Dougherty Laser Vision is committed to providing Continuing Education for the pre and post-operative management of surgical patients. We have provided an overview of treatment protocols in this manual, however, we encourage you to attend our Continuing Education seminars for discussions regarding these protocols and/or see the clinical presentations included in the doctor portal. Please contact our office if you have any questions regarding co-managing patients.



CATARACT CO-MANAGEMENT BILLING FOR MEDICARE

As per guidelines published by Medicare in 1992, specific components of major surgery were defined as the “global surgery package.” The components they identified included pre-operative care, intraoperative services, post-operative care (90 days), and in-office care for any postoperative complications. In addition, the value of post-operative care for surgical procedures was standardized and post-operative care for ophthalmic surgery was valued at 20% of the global surgery package. Medicare also published instructions to Medicare carriers on split billing of post-operative care, also known as post-operative co-management, within eye care. These instructions incorporated the following points, which are further defined in this section of our co-management manual:

1

Co-management requires a written transfer agreement between the surgeon and the receiving doctor(s).

2

Specific modifiers must be used on claims (54 - surgical care only; 55 - postoperative management only).

3

The receiving doctor cannot bill for any part of the service included in the global period until he/she has provided at least one service.

WRITTEN TRANSFER AGREEMENT

The transfer agreement between the surgeon and the co-managing doctor (optometrist) contains the surgeon’s discharge instructions and the effective transfer date. According to current Medicare policy, the transfer date is “determined by the date of the physician’s transfer order.” The responsibility for post-operative care may be transferred on or before the patient’s appointment for the subsequent follow-up visit with the receiving doctor, who may submit a claim for services once he has seen the patient. The split of post-operative care cannot be done or pre-arranged in advance of the surgery. Instead, a unique transfer agreement should be constructed for each patient.

Essential elements of the transfer agreement from the optometrist should include the following:

- **Patient Name**
- **Operative Eye**
- **Nature of Operation**
- **Transfer Date**
- **Results of First Post-Operative Visit**
- **Both doctors should retain copies of this documentation as part of the patient’s permanent records**

They may also serve as a useful attachment on claims, as necessary.

MODIFIERS FOR CLAIMS SUBMISSION

Immediately following surgery, the surgeon can submit a claim for the surgical component of care using the appropriate CPT Code, i.e. 66984, and Modifier 54. This modifier is used to indicate the surgical event in a co-managed case. Medicare assigns 80% of the global fee to the intraoperative service. Later the surgeon will submit a claim for his/her portion of post-operative care. In order for this claim to be accurate, the surgeon needs to know the date the optometrist assumed responsibility for the remaining post-operative care (the transfer date noted above). This claim will be filed using the appropriate CPT Code, i.e. 66984, and Modifier 55, which indicates post-operative management only. After the optometrist has seen the patient for post-operative care, he/she will submit a claim for the post-operative care provided, using the appropriate CPT Code, i.e. 66984, and Modifier 55. Again, in order for the claim to be accurate the optometrist must know the date he/she assumed responsibility for post-operative care (the transfer date). Medicare uses chronology and number of days to calculate payment for care rendered by each doctor during the post-operative period (90 days). The fees submitted by the surgeon and optometrist will be different, depending on the number of days of post-operative care each one provided. An example of billing by the surgeon and optometrist follows. If you would like assistance with billing of Medicare for your post-operative care, we have a medical billing service that we will refer you to.

When submitting claims, many Medicare carriers instruct providers to write a comment in the body of the claim form, as follows:

Surgeon | Assumed post-operative care on January 2, relinquished care on January 10

Optometrist | Assumed post-operative care on January 2, relinquished care on January 10

OVERLAPPING POST-OPERATIVE CO-MANAGEMENT

Many patients will have cataract surgery performed on the second eye shortly after their first surgery, in which case post-operative care may overlap temporarily. When these patients are co-managed, claims for each surgery are handled separately. The surgeon will file the second claim with Modifier 79, to indicate the second surgery is unrelated to the first (different eye). Both surgery claims will also be filed using Modifier 54, to indicate post-operative care is being co-managed. The post-op care claims will include both Modifiers 55 and 79 for the surgeon and the optometrist.

The chronology and windows of time on which payment is determined (as outlined above) are still relevant and the claims will be concurrent. The surgeon will determine if the transfer of care for the first surgery occurs before or after the second surgery. If the transfer of care for the first surgery occurs before the second surgery, then two transfer-of-care letters or forms and transfer agreement letters must be prepared, establishing a unique transfer date for each surgery.

The comments provided herein relate to billing for cataract co-management for Medicare patients. Commercial carrier policies will vary. Should you have questions about a specific carrier's policy, we recommend you contact them directly. Also, if you have questions related to Medicare billing procedures, you can visit their website, www.cms.gov, or contact our office for assistance.

GENERAL PRACTICE INFORMATION

For a complete list of our patient services, directions, maps and information about co-management of cataracts or our practice please visit DoughertyLaserVision.com and access the doctor's portal.

CATARACT

OD Post-Operative Visit Instructions

1 DAY POST OP

- UCVA
- SLE - record cells/flare, corneal edema, and lens position
- IOP - must perform on all patients

1 WEEK POST OP

- UCVA
- Refraction with BCVA
- Refraction - on all patients
- SLE
- IOP

1 MONTH POST OP

- UCVA
- Refraction with BCVA
- Refraction - on all patients
- SLE
- IOP
- DFE - if patient has poor BCVA or complaints associated with retinal detachment

3 MONTH POST OP

- UCVA
- Refraction with BCVA
- Refraction - on all patients
- SLE
- IOP
- DFE - if patient has poor BCVA or complaints associated with retinal detachment

6 MONTH POST OP

- Refraction

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

- If the patient has a stable residual Rx or PCO and needs a retreatment, please refer back to ADV after three months.
- If the cornea is clear, glasses or soft contact lenses may be prescribed if necessary to improve vision, as soon as 1-2 weeks after surgery.

Trouble Shooting

- **Increased IOP POD#1** - Above 24, have patient start IOP drop (NOT prostaglandin) and see back the next day. If over 35, then send back to ADV same day for aqueous release. Lower thresholds if pre-existing severe glaucomatous optic nerve damage.
- **Persistent increased IOP at one week** - Treat with glaucoma drops and monitor. The ocular hypertension is usually temporary.
- **Corneal edema** - Mild, no need for further treatment. Moderate to severe, increase steroid to 2 hours and see back a few days later. Add Muro128 if persists.
- **Decentered lens** - Refer back to ADV.
- **Severe pain, vision loss, hypopyon** - Refer to retina specialist stat, or ADV if uncertain.
- **Poor BCVA** - Verify Refraction, then dilate and check for CME. If patient has decreased BCVA mild CME can be easily missed so we advise doing an OCT. If you do not have access to one, please send back to ADV.

LASIK

OD Post-Operative Visit Instructions

1 DAY POST OP

- UCVA
- SLEx - make sure no infection, DLK, and flap is clear and smooth

1 WEEK POST OP

- UCVA
- Refraction - if patient is complaining
- SLEx - make sure no infection, DLK, and flap is clear and smooth

1 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx

3 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx

6 MONTH POST OP

- UCVA
- Refraction - only if necessary
- SLEx

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

If the patient has a residual Rx and needs a retreatment please refer back to DLV after three months and the Rx is stable.

Trouble Shooting

- **DLK** - If trace to mild, increase steroid to one drop every hour and see back the following day. If moderate or worse, increase steroid to one drop every hour and refer back to DLV IMMEDIATELY. In all cases, if DLK moves central or there is loss of vision, at day 3 or 4, refer the patient back to DLV IMMEDIATELY to wash out the flap. Waiting beyond day 4 could result in permanent haze and loss of best corrected vision.
- **Flap Straie** - Refer back to DLV immediately.
- **Severe Dry Eye/SPK** - If persists more than a few days increase ATs to one drop every 30 minutes, start on Restasis, and or temporary plugs.

IMPLANTABLE CONTACT LENS (ICL)

OD Post-Operative Visit Instructions

1 DAY POST OP

- UCVA
- SLEx - record cell/flare, corneal edema, PI patency, and lens vault
- IOP - must perform on all patients

1 WEEK POST OP

- UCVA
- Refraction - on all patients
- SLEx
- IOP

1 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx
- IOP
- DFE - if patient has poor BCVA or complaints associated with retinal detachment

3 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx
- IOP
- DFE - if patient has poor BCVA or complaints associated with retinal detachment

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

If the patient has a residual Rx and needs a retreatment please refer back to DLV after three months and the Rx is stable.

Trouble Shooting

- **Increased IOP** - Above 35, refer back to DLV.
- **Corneal Edema** - Mild, no need for further treatment. Moderate to severe, increase steroid to 6-8 times per day and see back a few days later.
- **Blocked PI** - Refer back to DLV.
- **Hyphema** - Refer back to DLV. Scattered red blood cells in the anterior chamber are okay.
- **Low IOP** - Below 6, check for leaking wound. If anterior chamber is well formed, then can see back the next day. If low IOP or wound leak persists for more than 3 days, can put a contact lens on to help with digital pressure or send back to DLV for a suture.

PRK

OD Post-Operative Visit Instructions

1 DAY POST OP

- UCVA
- SLEx - make sure no infection, contact lens is in place, and no significant stromal haze

1 WEEK POST OP

- UCVA
- SLEx - make sure no epithelial defects
- Remove bandage contact lens and check IOP
- SLEx - again once contact off to make sure no infection, and no significant stromal
- Check IOP to ensure patient is not a steroid responder

1 MONTH POST OP

- UCVA
- Refraction
- SLEx - make sure no infection, and no significant stromal haze
- Check IOP to ensure patient is not a steroid responder

3 MONTH POST OP

- UCVA
- Refraction
- SLEx
- Check IOP to ensure patient is not a steroid responder

6 MONTH POST OP

- UCVA
- Refraction
- SLEx
- Check IOP to ensure patient is not a steroid responder

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

- If the patient has a residual Rx and needs a retreatment please refer back to DLV after three months and the Rx is stable.
- Moderate stromal haze - increase steroid to QID for the first month. May need to increase further if stromal haze is severe.

REFRACTIVE LENS EXCHANGE (RLE)

OD Post-Operative Visit Instructions

1 DAY POST OP

- UCVA
- SLEx - record cells/flare, corneal edema, and lens position
- IOP - must perform on all patients

1 WEEK POST OP

- UCVA
- Refraction - on all patients
- SLEx
- IOP

1 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx
- IOP
- DFE - if patient has poor BCVA or complaints associated with retinal detachment

3 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx
- IOP
- DFE - if patient has poor BCVA or complaints associated with retinal detachment

6 MONTH POST OP

- As you see fit

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

If the patient has a residual Rx or a PCO and needs a retreatment please refer back to DLV after three months.

Trouble Shooting

- **Increased IOP** - Above 24, have a patient start IOP drop (NOT prostaglandin) TID and see back the next day. If over 35, then refer back to DLV same day for A/C burp.
- **Corneal Edema** - Mild, no need for further treatment. Moderate to severe increase steroid to 6-8 times per day and see back a few days later.
- **Decentered Lens** - Refer back to DLV.
- **Severe Redness Or Hypopyon** - Refer back to DLV.
- **Poor BCVA** - Dilate and check for CME, if patient has decreased BCVA mild CME can be easily missed so we advise doing an OCT. If you do not have access to one please send back to DLV.

CORNEAL CROSS LINKING (CXL)

OD Post-Operative Visit Instructions

1 DAY POST OP

(Patient Will Be Wearing A Bandage Contact Lens)

- UCVA
- SLEx - make sure no infection, contact lens is in place, and no significant stromal haze

1 WEEK POST OP

- UCVA
- SLEx - make sure no epithelial defect
- Remove contact lens
- Refraction/BCVA
- SLEx - again once contact off to make sure no infection, and no significant stromal haze

1 MONTH POST OP

(Optional at your Office)

- UCVA
- Refraction

- SLEx - make sure no infection, no significant, and no significant stromal haze
- IOP

3 MONTH POST OP

- Send to Dougherty Laser Vision to perform all required study testing

6 MONTH POST OP

- Send to Dougherty Laser Vision to perform all required study testing

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

The patient may get back into their usual RGP, scleral or soft lens as soon as the bandage lens is removed at 4-7 days. If the patient has a small abrasion at the time of surgery, the bandage lens should not be removed until the epithelium has healed.

CORNEAL CROSS LINKING AND INTACS

OD Post-Operative Visit Instructions

1 DAY POST OP

(Patient Will Be Wearing A Bandage Contact Lens)

- UCVA
- SLEx - make sure no infection, contact lens is in place, no significant stromal haze, and intact are at approx 50% stromal depth

1 WEEK POST OP

- UCVA
- SLEx - make sure no epithelial defects
- Remove contact lens
- Refraction / BCVA
- SLEx - again once contact off to make sure no infection, no significant stromal haze and intacs are at approx 50% stromal depth

1 MONTH POST OP

- UCVA
- Refraction
- SLEx - make sure no infection, no significant stromal haze, and intacs are at approx. 50% stromal depth
- IOP
- Refer back to Dougherty Laser Vision so we can perform required study testing including pentacam/orbscan/endocount/remove sutures

3 Month Post OP

- Send to Dougherty Laser Vision to perform all required study testing

6 MONTH POST OP

- Send to Dougherty Laser Vision to perform all required study testing

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

The patient may get back into their usual RGP, scleral or soft lens as soon as the bandage lens is removed at 4-7 days. If the patient has a small abrasion at the time of surgery, the bandage lens should not be removed until the epithelium has healed.

SMILE

OD Post-Operative Visit Instructions

1 DAY POST OP

- UCVA
- SLEx - make sure no infection, DLK, focal inflammatory keratitis and cap is clear and smooth

1 WEEK POST OP

- UCVA
- Refraction - if patient is complaining

1 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx

3 MONTH POST OP

- UCVA
- Refraction - on all patients
- SLEx

6 MONTH POST OP

- UCVA
- Refraction - only if necessary
- SLEx

YEARLY EYE EXAMS AT YOUR OFFICE (BILLABLE)

Tips/Pointers

If the patient has a residual Rx and needs a retreatment please refer back to DLV after three months if the Rx is stable.

Trouble Shooting

- **DLK**- If trace to mild, increase steroid to one drop every hour and see back the following day. If moderate or worse, increase steroid to one drop every hour and refer back to DLV IMMEDIATELY. In all cases, if DLK moves central or there is loss of vision, at day 3 or 4, refer the patient back to DLV IMMEDIATELY to wash out the cap. Waiting beyond day 4 could result in permanent haze and loss of best corrected vision.
- **Focal Inflammatory Keratitis** - If trace to mild, increase steroid to one drop every hour and see back the following day. If moderate or worse, increase steroid to one drop every hour and refer back to DLV IMMEDIATELY. In all cases, if FIK moves central or there is loss of vision, at day 3 or 4, refer the patient back to DLV IMMEDIATELY to wash out the cap. Waiting beyond day 4 could result in permanent haze and loss of best corrected vision.
- **Cap Straie** - Refer back to DLV immediately.
- **Severe Dry Eye/Spk** - If persists more than a few days, increase ATs to one drop every 30 minutes, start on Restasis Xiidra, and or temporary plugs.

SLT

OD Post-Operative Visit Instructions

2-5 DAY POST OP

- BCVA
- SLEx - record cells/flare and corneal edema (very rare) - communicate any concerns to surgeon
- IOP - must perform on all patients with a call to surgeon if > 24 or more than 5 points above baseline (whichever is higher)

6-8 WEEKS POST SLT (AFTER SECOND EYE IS DONE IN BILATERAL CASES) - THIS IS A BILLABLE VISIT

- BCVA
- SLEx - basic anterior segment exam
- IOP - assess whether predetermined goal has been achieved

If goal IOP achieved (75% of patients), resume regular monitoring for progression every 3-4 months

If goal IOP is not achieved, proceed to treatment plan B (will have been communicated with initial consult)

Regular follow ups as per glaucoma treatment standards (every 3-4 months) are necessary even when SLT is used as a medication sparing treatment. Even though results last 1-5 years, there are cases of early failure that need to be caught. In addition, we do not want to give patients a false sense of security or impression that their condition has been cured. Best reminder for patients that they have a chronic condition that needs close monitoring is to establish that pattern.

Even if IOP is deemed to remain within target range, we recommend a "check-in" with our glaucoma specialist once every 12-18 months with copies of all tests and IOP readings to double check and confirm lack of progression. This will help protect you and your patients in the long run. The choice of frequency of visits with Dr. Vosoghi of course remains yours.

LPI

OD Post-Operative Visit Instructions

6-8 DAY POST OP

- BCVA
- SLEx - confirm PI open through pupil transillumination (usually placed 12, 3, or 9 O'clock) record cells/flare and corneal edema (very rare) - communicate any concerns to surgeon
- IOP - must perform on all patients with a call to surgeon if > 22 or more than 5 points above baseline (whichever is higher)

All patients get treated with Lotemax or Prednisolone drops QID x 5 days to prevent inflammation and closure of PI. In rare cases, there may be breakthrough inflammation that happens after steroid withdrawal day 7 or 8. In such cases, restarting steroids with a 16 day taper (every 4 days down by one drop) starting at QID dosing usually does the trick.

4-5 WEEKS POST LPI (After Second Eye Is Done In Bilateral Cases) - This Is A Billable Visit

- BCVA
- SLEx - same as above
- IOP - assess whether IOP is elevated

MONTH 2-3 POST LPI

- A final check up with glaucoma surgeon is recommended to ensure PIs are open and make any final decisions on need for medications in cases where IOP is judged to be above goal.

Roughly 50% of narrow angle patients can go on at some point to develop a need for IOP therapy. These cases usually do very well with cataract surgery (even refractive lens exchange) as removing the natural lens creates a lot of space in the AC, deepening the angle, and in many cases removing the main risk factor for glaucoma. These cases can be co-managed as any other cataract referral to DLV and include refractive options for optimal vision after surgery. The other option is to start drop therapy and monitor closely for progression or worsening of PAS and IOP with a short threshold for referral. These patients need regular follow ups as per glaucoma treatment standards (every 3-4 months) unless they have successfully been treated with lens exchange. After lens exchange, their risk of glaucoma (assuming normal IOP) drops down to that of the regular population for their age.

INCISIONAL GLAUCOMA SURGERY

OD Post-Operative Visit Instructions

Given the higher risk and liability associated with incisional glaucoma surgeries, they will not be co-managed. Our glaucoma surgeon will take over the intense post-operative management for at least 3 months with frequent updates to the referring doctor. Follow ups after stabilization of the eye will be determined based on the comfort level of the referring doctor in monitoring post incisional surgery glaucoma patients (checking for bleb leaks, blebitis, scarring, infection, etc.). Training for those ODs interested in such management can be provided. In either case, patients having undergone incisional glaucoma surgery will need to be rechecked by our glaucoma surgeon every 3-12 months depending on risk factors for long term complications of surgery and the primary doctor's comfort level.

DR. VOSOGHI'S GLAUCOMA TIPS

Narrow Angles

Narrow angles and Narrow Angle Glaucoma are among the most under/misdiagnosed conditions in the eye world. The following are tips to avoid missing this relatively common condition:

1. Perform Gonioscopy or anterior segment OCT on patients' first visit to your office and every 10 years if angles open.
2. Perform Gonioscopy in ALL patients who are suspicious for glaucoma, ocular hypertensives, or hyperopes.
3. When in doubt, refer patient for a quick second opinion. Much better to be safe given the terrible potential consequences of an acute narrow angle episode.
4. Avoid dilating narrow angle patients if possible until they have had protective/preventive iridotomy performed.

Normal Tension Glaucoma

Up to 1/3 of glaucoma patients in major studies (particular in middle aged female patients) have NTG. These patients tend to have sight threatening visual field loss much earlier than standard POAG patients. Here are some tips to avoid missing NTG:

1. Consider a baseline OCT nerves or optic nerve photo (or both) in all patients explaining to them the need to set a normal baseline and screen for the common condition of glaucoma. It is invaluable to have baseline comparison if you become suspicious in the future.
2. Be extra vigilant in examining the optic nerves of female patients in the 35-60 age group with a history of Migraine headaches, Raynaud's phenomenon, anemia, or low blood pressure annually. Consider including these questions in your history intake questionnaires to screen for those at highest risk.

3. When in doubt, send the patient in for a one time second opinion to protect yourself from liability and your patient from the potential harm of delayed diagnosis.

GENERAL GLAUCOMA TIPS

A Since glaucoma is a common eye condition, having an index of suspicion in your at risk patients and always being on the lookout is important. Based on your patient's profile at the time of exam, you can determine what type of glaucoma each is at highest risk for and focus in on your exam to be most efficient. As a general rule, here are common risk factors to look for:

1. **POAG** - Myopes, African Americans (and other non-whites), the elderly, corneas, family history.
2. **Pigment Dispersion** - Young myopic males > females. Don't forget pupil illumination to check for iris transillumination and checking the corneal endothelium for a Krukenberg spindle on all myopes to screen for this condition.
3. **Pseudoexfoliation** - Those of Scandinavian or Russian descent. Look for deposits on lens once dilated.
4. **Narrow Angles** - Asian and Hispanic hyperopic females are at highest risk. Family history sometimes present. All hyperopes should undergo either gonioscopy or anterior section OCT to screen given the high incidence in this population. When in doubt, refer for second opinion given the potentially devastating consequences of missing this diagnosis. Every case of Acute Narrow Angle Glaucoma can be prevented with early detection and preventive Laser Iridotomy.
5. **Normal Tension Glaucoma** - Middle aged females with a history of Migraines, Raynaud's phenomenon, low blood pressure, anemia, or thyroid problems are at highest risk. It is highly recommended this information be solicited from your patients on your history questionnaires to screen those at highest risk.

B Dr. Vosoghi recommends consideration of a one-time baseline second opinion on all glaucoma and glaucoma suspect patients. As part of the consultation, you will be given feedback on:

1. Accuracy of your diagnosis and any patient specific considerations.
2. Recommendations for frequency of monitoring, follow up exams, and testing.
3. Baseline OCT if you do not have one.
4. Any recommended treatments for your patients.

INCISIONAL GLAUCOMA SURGERY

OD Post-Operative Visit Instructions

Having recommendations by a specialist documented on your patients will help you avoid unnecessary liability, justify and establish the importance of more frequent visits to your patients and their insurance carriers, and ensure the safest and highest level of care for your patients in the long run. Dr. Vosoghi looks forward to helping you take care of your glaucoma patients with his involvement titrated to your preferences and comfort level.

SLT, DR. VOSOGHI'S FAVORITE GLAUCOMA TREATMENT

Selective Laser Trabeculoplasty or SLT is frequently thought of as a second line treatment for open angle glaucoma or a last resort before incisional surgery. This line of thinking has changed in the last couple of years and Dr. Vosoghi strongly favors SLT as a first line or early adjunct to glaucoma medications. The reasons for this include:

1. The safety and efficacy profile of SLT easily rivals any class of medication currently available on the market. We expect 20-30% pressure reductions from baseline in 75-85% of patients with almost no side effects (with the exception of the rare and transient IOP spike or blurry vision for a few days).
2. 50% of patients on drops have a significant degree of non-compliance based on pharmacy record studies. SLT takes away the concern for compliance with drops (or at least limits them).
3. Drops frequently have side effects including cosmetic concerns for the PGAs, heart/lung concerns for Beta-Blockers, fatigue/dry mouth/allergy concerns with Alpha-Agonists, and lack of long term efficacy (tachyphylaxis)/allergy concerns with CAIs. SLT avoids these considerations.
4. Many of our patients find the lifestyle modification required by taking drops daily (work schedule disruption, contact lens wear disruption, etc) a big inconvenience. SLT gives your patients a chance to avoid the inconvenience.
5. Cost. With insurance coverage for medications becoming less and less appealing to our patients, SLT frequently presents a savings of hundreds of dollars per year over medications.

Of course, we will continue to offer SLT as a second line or adjunct to medications as well. For information on Co-Management of SLT, please refer to the "*OD Post-Operative Visit Instructions*" section or call our office directly at **805.987.5300**.



REFRACTIVE SURGERY GUIDELINES

805.987.5300 • doughertylaservision.com • info@doughertylaservision.com

Myopic LASIK

Up to -6 to -8

Hyperopic LASIK

Up to +3

Toric LASIK

Up to -6

PRK/LASEK

thin K, up to -3

SMILE

-1 to -8

Visian ICL

-3 to -16

Visian ICL Toric

-1 to -4

Lensectomy

>45 yo, high +/-

Keratoconus

Intacs, CXL



Refractive Lens Packages Cataracts

805.987.5300 • doughertylaservision.com • info@doughertylaservision.com

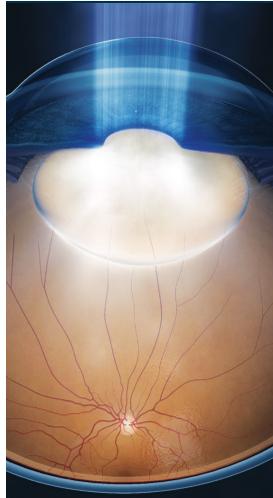
PACKAGES	LENS DESCRIPTION	COST	NEED FOR GLASSES OR CONTACT LENSES	LASER ENHANCEMENT (COST) **IF NEEDED	ASTIGMATISM TREATMENT INCLUDED	MONOVISION	LASER ASSISTED
STANDARD IOL PACKAGE	<ul style="list-style-type: none"> • Basic IOL • Spherical 	Medicare Covered + Co-ins. + Deductible	YES For Reading, Computer and Likely Distance	\$2975/Eye	NO	NO	NO
ENHANCED IOL PACKAGE	<ul style="list-style-type: none"> • Nanoflex • Aspheric IOL 	\$1495/Eye- Out Of Pocket + Co-ins. + Deductible	YES For Near and Computer, Unless Monovision	\$995/Eye	YES	YES	YES \$1500 Extra Per Eye
PREMIUM IOL PACKAGE	<ul style="list-style-type: none"> • Softec HD • Tecnis MF • Symfony • Symfony Toric • AMO Toric 	\$3495/Eye + Co-ins. + Deductible	NO In Some Cases Just For Reading and Possibly Computer if No Monovision	<ul style="list-style-type: none"> • \$0 Out Of Pocket • Included In Package 	YES	YES	YES \$1500 Extra Per Eye



WHICH PACKAGE IS BETTER FOR ME?

805.987.5300 • doughtertylaservision.com • info@doughtertylaservision.com

REFERENCE PACKAGE	UP CLOSE READING	INTERMEDIATE/ COMPUTER	DISTANCE VISION	LASIK DISCOUNTED	LASIK INCLUDED	ASTIGMATISM CORRECTION	MONOVISION
STANDARD							
ENHANCED			>	>		>	>
PREMIUM	>	>	>		>	>	>

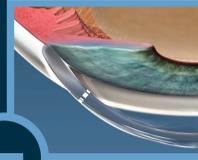


The Cataract Procedure

1

Incision

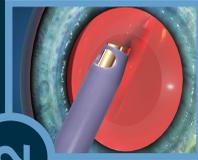
A small incision is made to allow an instrument to pass into the eye.



2

Removing the Cataract

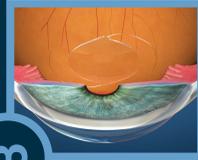
Ultrasonic waves are used to break the cataract into small pieces to be suctioned away.



3

Inserting the New Lens

The new lens is inserted into the capsular bag inside the eye where the cloudy natural lens was once located.



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CALL (805) 987-5300
TEXT (818) 874-3048



What exactly is a cataract?

A cataract is a clouding of the normally clear lens in your eye. Though painless, cataracts can blur your vision by restricting the amount of light that enters your eye.

In addition to hazy vision, indications of cataracts include increasing glare, poor night vision, **difficulty reading small print, and a change in how your eyes perceive colors.**

Your Lens Options



Monofocal

- Standard lens option
- Will require glasses at all distances



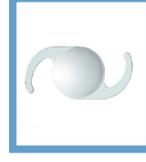
Astigmatism

- Addresses astigmatism
- Great quality distance vision
- Will require glasses for near vision unless monovision employed



Multifocal

- Splits light into distance and near components
- **Offers the potential for freedom from glasses**
- Glare and halo will occur at night and low light situations



Softec HD

- Increased depth of focus
- Great quality of vision
- Will require glasses for near vision unless monovision employed



Aspheric

- No increased depth of focus
- Great quality of vision
- Will require glasses for near vision unless monovision employed

Camarillo

1821 E Daily Dr.
Camarillo, CA 93010
Phone: 805.987.5300

Encino

16542 Ventura Blvd., Ste 400
Encino, CA 91436
Phone: 805.987.5300

San Luis Obispo

835 Aerovista Lane, Ste 110
San Luis Obispo, CA 93401
Phone: 805.987.5300

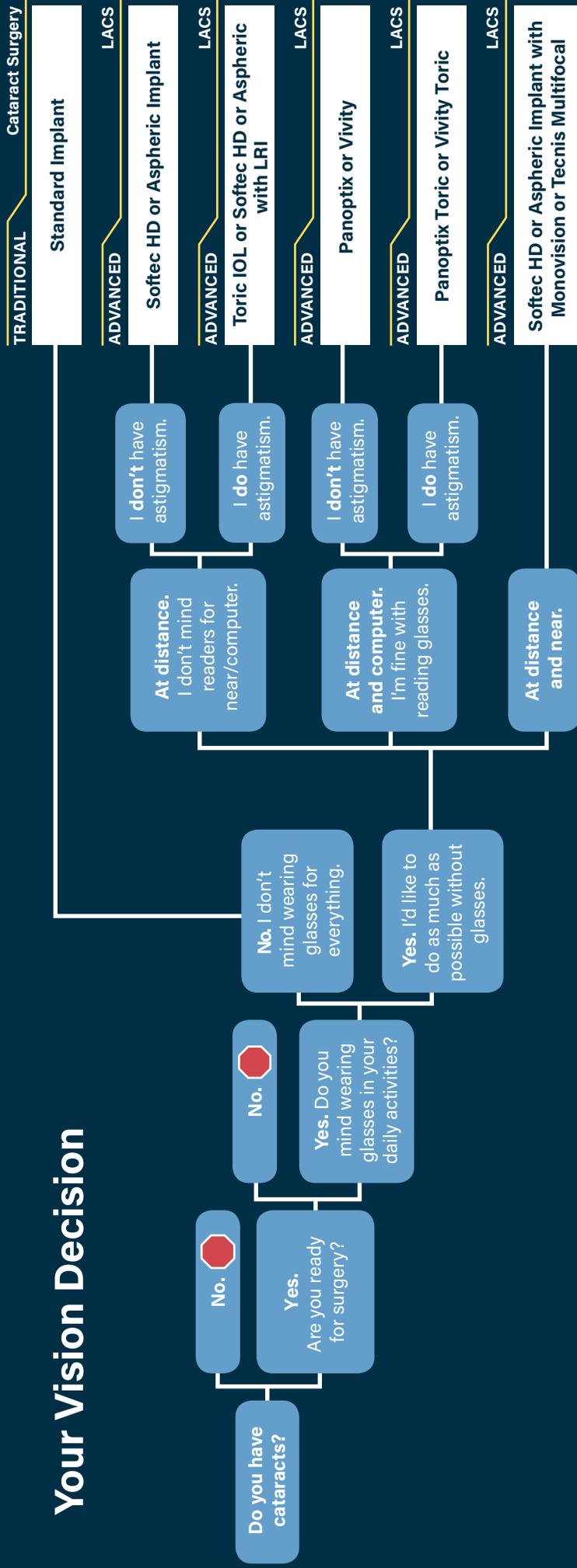
Simi Valley

2796 Sycamore Dr., Ste 101
Simi Valley, CA 93065
Phone: 805.987.5300

Westlake Village

4333 Park Terrace Dr., Ste 102
Westlake Village, CA 91361
Phone: 805.987.5300

Your Vision Decision



Is cataract surgery right for me?

1. Are you frustrated with your vision?
2. Do you feel like your lifestyle is impaired by your vision?
3. Do you have trouble seeing while driving (especially at night)?
4. Do you experience glare or halos at night?
5. Is your vision level getting worse?

Laser-Assisted Cataract Surgery

- Ziemer Z8 Laser-Assisted Cataract Surgery (LACS) is a **custom, blade-free** cataract removal procedure now offered at DLV Vision.
- Surgeons experience **more control and precision**, plus LACS features real-time tools for an accurate visual of what's going on inside the eye.
- LACS and a variety of intraocular lenses may give patients even **more visual freedom** after cataract surgery, helping them **remain active for decades**.
- **Limbal Relaxing Incisions (LRI)**, for control of astigmatism, are made even more accurate with the laser.



WHY CO-MANAGE WITH DOUGHERTY LASER VISION

805.987.5300 • doughertylaservision.com • info@doughertylaservision.com

CATARACT

PAUL J. DOUGHERTY, M.D.

- ✓ ECONOMY PACKAGE (Mid Range Budget)
- ✓ PREMIUM PACKAGE WITH TORIC
- ✓ SOFTEC HD-ACCOMMODATING IOL
- ✓ SYMFONY EXTENDED DEPTH OF FOCUS
- ✓ SYMFONY TORIC (FIRST Presbyopic-Toric Correcting)
- ✓ DROPLESS-CATARACT SURGERY
- ✓ ISTENT-MICROINVASIVE GLAUCOMA SURGERY
- ✓ Z8 LASER ASSISTED (Less Energy & Mobile) CATARACT/REFRACTIVE SURGERY
- ✓ LASIK OVER CATARACT SURGERY TO CORRECT REFRACTIVE RESIDUAL ERROR
- ✓ IN OFFICE CATARACT SURGERY
- ✓ PVERIFY-PATIENT FEE ESTIMATOR BEFORE CATARACT SURGERY
- ✓ PATIENT PRIVATE DRIVER
- ✓ BILATERAL CATARACT SURGERY
- ✓ CUSTOM TAILORED CATARACT PACKAGE TO PATIENT

OTHER SURGEONS

- NO ECONOMY PACKAGE (Mid Range Budget)
- SOME PREMIUM PACKAGE WITH TORIC
- SOME SOFTEC HD-ACCOMMODATING IOL
- SOME SYMFONY EXTENDED DEPTH OF FOCUS
- SOME SYMFONY TORIC (FIRST Presbyopic-Toric Correcting)
- SOME DROPLESS-CATARACT SURGERY
- SOME ISTENT-MICROINVASIVE GLAUCOMA SURGERY
- NO Z8 LASER ASSISTED (Less Energy & Mobile) CATARACT/REFRACTIVE SURGERY
- ✓ LASIK OVER CATARACT SURGERY TO CORRECT REFRACTIVE RESIDUAL ERROR
- NO IN OFFICE CATARACT SURGERY
- NO PVERIFY-PATIENT FEE ESTIMATOR BEFORE CATARACT SURGERY
- SOME PATIENT PRIVATE DRIVER
- NO BILATERAL CATARACT SURGERY
- SOME CUSTOM TAILORED CATARACT PACKAGE TO PATIENT

REFRACTIVE SURGERY

PAUL J. DOUGHERTY, M.D.

- ✓ DEVELOPED CATZ NEW TOPOGRAPHY GUIDED LASIK
- ✓ CUSTOM LASIK
- ✓ Z8 LASER ASSISTED (Less Energy Per Pulse)
- ✓ ICL-TOP IMPLANTER IN COUNTRY
- ✓ CROSSLINKING
- ✓ CROSSLINKING/INTACS
- ✓ LIFETIME COMMITMENT
- ✓ 40,000 REFRACTIVE PROCEDURES
- ✓ FDA STUDY SITE RAINDROP
- ✓ SMILE (Small Incision Lenticule Extraction)

OTHER SURGEONS

- NO DEVELOPED CATZ NEW TOPOGRAPHY GUIDED LASIK
- SOME CUSTOM LASIK
- NO Z8 LASER ASSISTED (Less Energy Per Pulse)
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ADDITIONAL SERVICES OFFERED

PAUL J. DOUGHERTY, M.D.

- ✓ REFERS NEW PATIENTS BACK FOR CO-MANAGEMENT
- ✓ MARKETING PLAN- (Customized Marketing Plan For Your Office)
- ✓ MARKETING TOOLS-(Video Shoot, PR, Custom Brochures)
- ✓ BUSINESS SUMMARIES- INCLUDE YEAR TO DATE ANALYSIS
- ✓ WEB BLASTS-CUSTOM
- ✓ STAFF TRAINING-IN OFFICE CUSTOM
- ✓ SURGERY SCHEDULER TRAINING
- ✓ OPTICAL-WE DON'T COMPETE WITH YOUR BUSINESS
- ✓ ANNUAL CE EVENTS

OTHER SURGEONS

- SOME REFERS NEW PATIENTS BACK FOR CO-MANAGEMENT
- NO MARKETING PLAN- (Customized Marketing Plan For Your Office)
- NO MARKETING TOOLS-(Video Shoot, PR, Custom Brochures)
- NO BUSINESS SUMMARIES- INCLUDE YEAR TO DATE ANALYSIS
- MOST WEB BLASTS-CUSTOM
- SOME STAFF TRAINING-IN OFFICE CUSTOM
- NO SURGERY SCHEDULER TRAINING
- SOME OPTICAL-WE DON'T COMPETE WITH YOUR BUSINESS
- SOME ANNUAL CE EVENTS

