Thank YOU!!

- First off, I want to thank you for all your referrals to OES/SVC, we couldn't do it without you!
- This presentation is to help you feel more comfortable with the before and after care with cataract surgery.
- I will be going over mostly the basics.

Video
Cataract Surgery CO-Mgmt

- This is where it all begins!
- “Congratulations, You have a cataract”

Pre-operative Exam

- Surgery Qualifiers
  - There must be some form of medical necessity to proceed with cataract surgery. This comes in the form of “reduced ability to perform daily living activities” this includes:
    - Difficulty driving during the daytime
    - Difficulty with night driving
    - Difficulty with reading
    - Difficulty seeing at work
    - Difficulty with depth perception
    - Etc.
  - This must be documented in order for insurance to pay for surgery.

Lifestyle Changes Questionnaire

- This must be documented for each eye
- This also must be documented for a YAG laser procedure
- It is not acceptable to Medicare to just document “patient has blurry vision” – there must be some activity that is being affected by the blurry vision and it must be documented in the chart.
Lifestyle Changes Questionnaire

Medication Protocol’s

• Besivance Ophthalmic suspension
  • One drop 3x daily in the surgical eye for 7 days.
• Durezol Ophthalmic suspension
  • One drop 3x daily for 14 days then
  • One drop 2x daily for 7 days then
  • One drop 1x daily for 7 days and stop
• For Diabetics or patients with risk of CME
  • Nevanac TID for one month
  • Of levro Once daily for one month
• Generics are OK – usually 4x a day depending on the brand.
• Shield at bedtime for one week.

Post Op Drop Form
Additional Factors

- BAT (Brightness Acuity Test) or Glare test of 20/40 or worse for night driving vision
- Some patients see well during the day but may have a dramatic decrease in their night vision. BAT test can provide good clinical evidence of this complaint.

- Things to consider
  - Is the cataract contributing to vision loss? And how much?
  - Or is it other pathologies that are contributing to the vision loss?
  - Will surgery improve the vision enough to outweigh the risks?

Pre-OpExam – Front to Back

- Things to look for during exam:
  - Lid:
    - Blepharitis – much more at risk for infection. Treat bleph prior to surgery with lid scrubs such as Avenova or Ocusoft. Also consider oral Doxycycline if moderate to severe.
  - Demodex –
    - Avenova lid scrubs
    - Tea Tree Oil or Citriderm
    - [ocular stinging/burning may occur]
    - Blephex (tool that mechanically removes colarettes)

Pre-Operative Exam

- Ectropion or Entropion – poor lid position may affect the corneal surface and delay recovery.
- Consider referral to Dr. Sumit Sitole, MD for a lid consultation and repair prior to surgery
Pre-operative Exam

- **Conjunctiva:**
  - Conjunctivitis – should be clear of any viral or bacterial infections prior to surgery.

- **Cornea**
  - Pterygium - can induce corneal astigmatism, if progressive can change to refractive error. If Toric IOL, may want to consider removal of Pterygium first, to ensure refractive stability.

Pre-op Exam – Cornea

- **Dry eye Syndrome**
  - Management prior to surgery can improve accuracy of calculations and improve quality of vision.
  - Post op medications can also cause keratitis
    - Change medications if this occurs. Durezol to Lotemax Gel for example

Pre-op Exam – Cornea

- **EBMD**
  - May have corneal slough, abrasion or RCE
  - Slow visual recovery
  - Delayed healing due to irregular epithelium
  - Lingerer corneal edema
  - Fluctuating vision and Mrx
Pre-op Exam - Cornea

• **HSK**
  - Can be disciform or dendritic
  - Surgery may reactivate the virus
  - Preoperative prophylactic antiviral orally can minimize the risk.
  - 500 mg Famvir po TID for 7 days

Pre-Op Exam - Cornea

• **Fuch's Dystrophy**
  - Corneal edema is expected at 1 day po
  - May linger for many weeks or months
  - Muro Ung can be helpful
  - Patient education pre-op is very important for expectations post op.

Pre-operative Exam - Cornea

• **Astigmatism**
  - Corneal astigmatism
    - If greater than 1.25 consider a toric IOL
    - Must be linear with no irregularities
    - Toric IOLs can correct up to 4 diopters of cyl
    - If less than 1.0 D can consider LRI (limbal relaxing incision)
Pre-Operative Exam

• **Previous Refractive Surgery** - This is very important to consider prior to cataract surgery.
  - Patients to be informed they may not be glasses free after cataract surgery.
  - The refractive procedure changes the curvature of the eye
  - This change in curvature affects the accuracy of IOL calculations

ORA – Optiwave Refractive Analysis

• Performed in the OR once the Cataract has been removed
• Gives surgeon more information for IOL selection.
• $400/eye
• Not a guarantee they will not need glasses after surgery.

Pre-Operative Exam

• Iris
  - **Floppy Iris Syndrome** - Flomax (Tamsulosin) can weaken the Zonules and increase risk of surgical complications.
  - **Posterior Synechia** – adhesion may make it difficult to dilate as well as to perform the capsulorhexis.
  - **Iritis** - More prone to inflammation post operatively, watch more closely and may need increased steroid dosing as well as longer taper.
Pre-Operative Exam

- Lens:
  - Many forms of cataracts
  - The usual suspects
    - Nuclear Sclerosis
    - Posterior Sub-capsular Cortical Spoking

Pre-Operative Examination

- Pseudoxefoliation (PXF) - white flakey debris (fibrillary residue from lens and iris pigment epithelium) Pt will also have Transillumination defects
  - Risk for Glaucoma
  - Risk for complications due to zonular weakness and poor dilation

- Previous trauma
  - Phacodonesis - "tremulous" state of the lens, typically due to injury and breakage of the zonules.

Pre-Operative Examination

- Vitreous:
  - PVD may occur post operatively,
  - Floaters may also become more noticeable after cataract surgery
    - If previous vitrectomy surgery can be more challenging due to weaker zonules
      - Higher risk of lens fragments
Pre-Operative Exam

- ERM-
  - Look very carefully at the macula
  - If you have the instrument, do an OCT to rule out subtle findings.
  - ERM can limit acuity after surgery.
  - This is especially important in premium IOL's!
  - Important to educate the about realistic expectations post operatively.

Cataract surgery pre-op exam

- AMD –
  - Make sure no active wet or new onset, prior to surgery.
    - If currently having injections, make sure the patient stays on schedule after surgery as well.
  - Cataract surgery can help to improve some quality of vision, color perception, peripheral vision, more light to the macula.

Pre-operative exam

- Diabetics are more prone to CME
- Start NSAID’s
  - Illevo 1 x daily
  - Nevanac 3 x daily
  - Ketolorac 4 x daily
Pre-operative exam - Macula

- Macular hole
- Vitreo-macular adhesion
- If moderate cataract it can be hard to detect pre-op.

Pre-op exam - Retina

- Peripheral retinal pathologies
- Can be more at risk for retinal detachment
- Consider referral to Dr. Shukla or Dr. Teeter for retinal consult prior to surgery

Surgery Day

- Patients will be called within a few days of surgery with check in time.
- Diabetics and ill patients are scheduled first, younger healthy patients go last.
Post Operative Care – 1 day

- **IOP** should be less than 25, if elevated – avoid prostaglandins
- **Acuity** should match corneal edema, if not look at retina (usually still dilated from surgery the day before)
- **Corneal edema** – Should have edema at wound site and relatively clear centrally.
  - Examine wound site to ensure secure
- **Anterior Chamber** should be trace to 1+ cells
- If 2+ or greater, increase the steroid drops – depending on amount of inflammation
  - If hypopyon or gelatinous strands with 3-4+ cells refer back to Omni/SVC immediately (same day referral).
  - If lens fragment in anterior or posterior chamber, refer back to surgeon urgently, for removal or close observation.

---

Post op Restrictions

- Patient can bend over after the first day
- No lifting over 25 lbs for 1 week
- No touching or rubbing the eye
- Avoid water in the eye during shower/bathing
- Shield to be worn at bedtime for 1 week
- Can start back on oral medications if discontinued for surgery
- No swimming pools or hot tubs for 2 weeks
- Minimize near tasks/reading for first 24 hours

---

Post Operative Care- 1 Week

- **Acuity** - should have improved as pupil has come down and corneal edema has resolved
- **Corneal edema** - If moderate edema, look at the other eye searching for cornea guttata, EBMD or other corneal dystrophy that can prolong edema
- Check IOP - If elevated, cornea will have micro-cystic edema.
  - This is a little early for steroid response, but it could happen.
  - Also if the other eye was operated on first and has been on steroid drops for several weeks.
- **Anterior chamber reaction** should be trace -1+ cells
  - If rare to trace cells, consider a faster taper schedule
- **Refraction** – may have small residual refractive error, astigmatism or an intentional targeted power to either match the other eye or for mono vision.
Post Operative Care

- Astigmatism post op
  - Look at corneal topography to quickly identify Cylinder axis and expected power.
- If toric IOL, cylinder should be minimal.
- Check axis markers on lens by dilating the pupil
- Line up the slit lamp beam to match the axis markers. Then look on slit lamp axis indicator
- It should match the corneal cylinder on topo

Post op 1 month

- Refraction should have stabilized by now
- Anterior chamber should be quiet
  - If residual cells – need to do a long, slow taper
  - All corneal edema should be resolved
  - Unless Fuch’s dystrophy with prolonged edema
  - Refer back to surgeon if prolonged edema
- Steroid response is still possible at this point, be sure to check IOP at this visit – even if only using drop once daily.
- If elevated IOP – select an IOP reducing medication avoid prostaglandins as they can reactivate any residual inflammation.

1 Month Post Op

- Refraction to prescribe spectacles
Post op 2-3 months

- CME
  - More common in Diabetic Patients
  - Will have reduced BCVA. Some have similar complaints as AMD changes with distorted lines, edges and reduced reading vision.
  - OCT – best way to diagnose and monitor the CME
- Start on Topical NSAIDS
- Should be improvement within a few weeks to a month of initiating treatment.

Posterior Capsular Cataract

- Posterior capsular opacity after IOL implantation
  - Can occur months or years after cataract surgery
  - 20%-50% (depending on the study).
  - Similar symptoms as a typical cataract

Yag Laser Capsulotomy

Yag laser capsulotomy – performed after 90 days post op.
- Must have decreased vision, same qualification as original cataract
- Educate patients-quick, painless, patient reassurance that it is not the same as original cataract procedure.
- Mild steroid drop for one week then stop
- IOP check shortly after procedure and again at 1 week
- Patient may notice increase in floaters –
  - Dilate at one week visit if more floaters noted
Cataract Post op Care

- Concerns or questions?
- We are happy to see the patient if you want us to take a look.
- We are happy to answer questions, give us a call
- Enjoy celebrating restored vision with your patients

Vandi Rimer, OD
303-740-5475
vrimer@omnieye.com

Thank you for your referrals