Modern Day Cataract Care

London 2012
Monday April 30
3:30-4:30 PM

Basic Principles of Cataract Co-Management

- History of Comanagment in the U.S.
- Mechanism developed to pay OD's for post-op care rendered
- Make sure patient knows of any co-management arrangement and agrees to it willingly

History

- Procedure, Eye, Date, Surgeon
  - S/P Pterygium resection OD x 1 day (Status-post)
  - S/P Trabeculectomy with MMC. POD # 1

s/p IOL OS 7/15/10 Dr. Woodard
s/p IOL OD 7/26/10 Dr. Woodard

History

- Subjective complaints
  - Foreign body sensation
  - Pain, discomfort, sleep
  - Nausea, vomiting
  - Visual status/improvement
  - Photopsias, other visual sensations

Pre/Post-operative medications/instructions

- Moving target
- No clinical studies to support prophylactic antibiotics but many use them anyway
- NSAIDs to prevent CME
- Steroids for inflammation

Component 1:
History

- Eye: functional history such as "problems with glare/TV/driving at night"
  - Activities of Daily Living: MUST BE DOCUMENTED!
- Social History: ?chronic depression, bipolar, anxiety disorders
- Observation during exam: ambivalence, excessive questioning, unrealistic expectations, wanting guarantees

Past Eye and Medical History Critical

- Medications: Flomax?
- Contact Lens Wearer?
- Prednisone (PSC)
- Trauma
- Family history of cataracts at a young age
- Diabetes/Hypertension
  - How long have you had it
  - What do you take for it
  - Is it under control/when last checked
  - Doctor's name

Component 2:
Vision and Refraction

- Visual Acuity (D & N)
- Pinhole should be part of vision
  - Monocular diplopia or glare alleviated?
- Glare testing or BAT (medium setting), or "Ambient Light" (room lights on)

for any patient who is 20/40 or better

Component 3:
Ocular Health

- Slit Lamp
- Dilated Fundus Exam

When in doubt about the retina, get an OCT……..especially with premium lenses!

Time to Write Down Your Impression and Plan

- Impression:
  - "Cataracts OD > OS with difficulty reading OU
  - 2+ NS consistent with reduced VA
  - Would like to rely less on glasses
- Plan:
  - Schedule bilateral Restor IOL's OD then OS
- Premium IOL discussed, patient not interested/Schedule conventional monofocal IOL OD then OS

Or…….

- Impression:
  - "Cataracts OU, night driving problems
  - 3+ NS consistent with reduced VA
  - 2 diopters of cylinder
- Plan:
  - IOL's OD then OS
  - Patient denies Toric

Communication Key!

- Communicate pertinent findings directly to surgeon…don't leave it to chance!
  - Meds (Flomax) and Conditions (Pseudoexfoliation Syndrome, Glaucoma) Ocular Surface Disease

Topography Helpful: Rule Out Multifocal Candidates and Rule In Toric Candidates

Let Surgeon Know About Lasik Patients!

- **Central K from Topo x 1.1 - 6.1**
- Modified Maloney Formula
- **Gives you K's that will go into IOLmaster**
- **Still need to warn patient they have a chance of needing an IOL exchange!**

Surgical Techniques

- US and UK/Europe

Laser Refractive Cataract Surgery with the LenSx® Laser

Femtosecond Lasers in Eyecare

- Cornea
  - Flaps for LASIK
  - Transplant Procedures
  - Intrastromal and Lenticule Refractive Procedures
- Scleral
  - Glaucoma Treatments
  - Presbyopia Procedures
- Crystalline Lens
  - Presbyopia Reversal/Delay
  - Cataract Surgery
- Vitreous/Retina
  - Vitreous cutting
  - Retinal imaging/treatment

A New Category in Ophthalmic Surgery

One precise, image-guided femtosecond laser procedure to:

- Effectively fragment the nucleus
- Create a perfectly centered and sized capsulotomy
- Perform complex multi-planar corneal incisions, and
- Arcuate incisions to address pre-existing astigmatism

Goals of Laser Refractive Cataract Surgery

- **Improve Every Procedure, Technology and Surgeon**
  - Presbyopia, Astigmatism & Monofocal
  - Refractive Precision and Integration

Key Step	Current Surgery	Refractive Impact	Safety Impact
Corneal Incision	Underutilized Not Optimized	Astigmatism	Infection
Capsulorhexis	Variable Sized, Not Centered	Variable IOL Position & Effective Lens Power	Capsular Tears, Posterior Capsule Opacification
Lens Fragmentation	Excessive Ultrasound Power	Delayed visual recovery	Loss of endothelial cells, Capsule Rupture

Laser Corneal Incisions

Computer-controlled depth, shape and location

- Precise, OCT corneal thickness measurement
- Flexible femtosecond laser incision architecture
- Automated reproducibility allows surgeon to address astigmatism
- Efficacy of femtosecond lasers established in over 3 million corneal incision procedures for LASIK flaps and keratoplasty

BUT……..

- OR time
- Phako time
- I/A time
- For the top-notch surgeons, is it really going to make a difference?

Private Pay Refractive Cataract Surgery

- Draws from largest surgical market
  - 18M annual WW procedures
  - Grows to 22M WW by 2015

Conclusion

- A new Category is emerging in private pay ophthalmic surgery
- LenSx technology will drive innovation for true

Laser Refractive Cataract Surgery

- Unique precision for capsulotomy and corneal incisions
- Smaller incisions and laser optimized wound architecture
- Improved IOL performance via Effective Lens Positioning
- Correction of pre-existing astigmatism at time of surgery
- A more predictable, safe and reproducible procedure
- Technology that will enable surgeons to deliver better vision

As far as the IOL is concerned…

- The "old days" of sending the patient on to your surgeon and not thinking about the refractive result are over
- You know more about their refractive history than anyone else, so be involved and stay involved

The Choices in High Technology or "Premium" Lenses

- Multifocal lenses
- Accommodating lenses
- Toric lenses
- Multifocal/Toric combination: Europe only!

Who Should You Discuss Premium Lenses with?

- **Everyone!**
- **Tell the non candidates why they are not**
- **Document in chart**

Using the Right Terminology

- Premium lens
- Lifestyle lens
- High Technology Lens
- Multifocal lens

Good Candidates?

- Cataract patient presents with one pseudophakic eye (monofocal lens) and a cataract in the other eye, or a cataract in one eye only
- Patient presents with s/p lasik ou, now has cataracts ou
- Patient has >2 diopters of cylinder

Who should you "watch out" for?

- Patients that are hypercritical with unrealistic expectations
- Patients with over 1 D of cylinder
- Patients who drive at night for a living or with long term glare complaints
- Patients who want guarantees, and think that the price includes glasses and care for life

Save Yourself Some Time

- *I mention the cost early on to save a lot of unnecessary discussion*
- *Document in chart that you offered it and patient declined*

Post Op Visits

- CDE on Alcon Infiniti
- "Cumulative Dispersed Energy" = average U/S power ×U/S time
- Should be under 5 for most skilled surgeons
- If over, look for corneal folds/edema
- Ask your surgeon to inform you of abnormal CDE's

Post-Op Visits: 1 Day, 1 Week

- Check VA and pinhole
- Refract
- IOP
- Slit Lamp: should be trace cell
- Fundus check 1 week or 1 month

Post-Op Visits: 1 Month

- Check VA and pinhole
- If <20/40, refract
- IOP
- Slit Lamp: should be no cell or flare
- Fundus check if didn't do it at one week
- Final Rx

Post-Op Visits: Whats Different with Premium IOL's?

- Restor: check reading vision and find the "sweet spot"
- Until second eye is done, vision may not be optimal
- Toric: do a refraction if VA not 20/20 or close

The Case of the Unexplained VA

*69 y/o F, cat sx (ReStor OU) 5 mo ago
*20/20 OD, 20/50 OS (distance UCVA)
*20/25 OS w/+1.00 sph
*J1 OD, J5 OS (near UCVA)
*S/P YAG cap OS 1 mo ago
*Ref for 2nd opinion, poss. LASIK

- SLE- nl
- Topo- .25D WTR, regular
- DFE- nl
- Pachy- 542 OD, 538 OS

Low Grade CME

- Subclinical (not visible)
- Hyperopic Shift
- Reasonably good BCVA
- Poor "quality" vision
- OCT/FA needed

CME Treatment

- Topical NSAIDS: Xibrom, Nevanac, Accuvail (recent recall) , generic Diclofenac (Voltaren)
- Topical steroids
- Retrobulbar steroids
- PO NSAIDS

Results after 6 Weeks

- 20/20-1 UCVA distance
- J1 near
- +0.25 sph
- Patient happy!!!!

Post-Op Considerations

- These patients are very sensitive to visual changes, so pay attention to the retina and attend to the ocular surface

PCO

- Our experience: These patients are more sensitive to it.
- Thus….YAG laser capsulotomy earlier than monofocal lenses although best to wait 3 months for insurance purposes

The following can severely affect the outcome of cataract surgery:

- Pterygium
- Salzmann's Nodular Degeneration

Conclusion