

# Cataract Surgery: A Look Ahead

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Don't forget the days when all we could do was to send cataracts out!

- 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

## 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

## 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
  - Visit the surgeon so you know what patients will experience



You wouldn't send this.....

So why send this?

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

# Salzmann's Nodules

- Follows episodes of keratitis
- Collagen plaques with hyalinization
- Anterior to Bowman's
- Irregular epithelium
- F.B. sensation/photophobia
- Superficial keratectomy

# Superficial Keratectomy for Salzmann's nodules

## 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 A Scan**
- **Still need to warn  
patient they have a  
chance of needing an  
IOL exchange!**

New technology for better outcomes

- The all in one biometer, keratometer, pachymeter, pupillometer and IOL calculator

Get up to nine measurements in one shot, including lens thickness.

- The biometer for toric IOL

LENSTAR's unique dual zone keratometry provides equivalent measurements of axis and astigmatism to the Gold Standard manual keratometry, improving your workflow for toric IOL.

- Lens thickness for improved IOL prediction accuracy

LENSTAR is the first optical biometer on the market providing this key parameter for more accuracy in the IOL prediction using latest 4th generation IOL calculation formulae.

- Post refractive IOL calculation with no need of clinical history

Featuring the Shammas No-History method, LENSTAR provides the cataract surgeon with an easy to use tool for the calculation of post refractive patients.

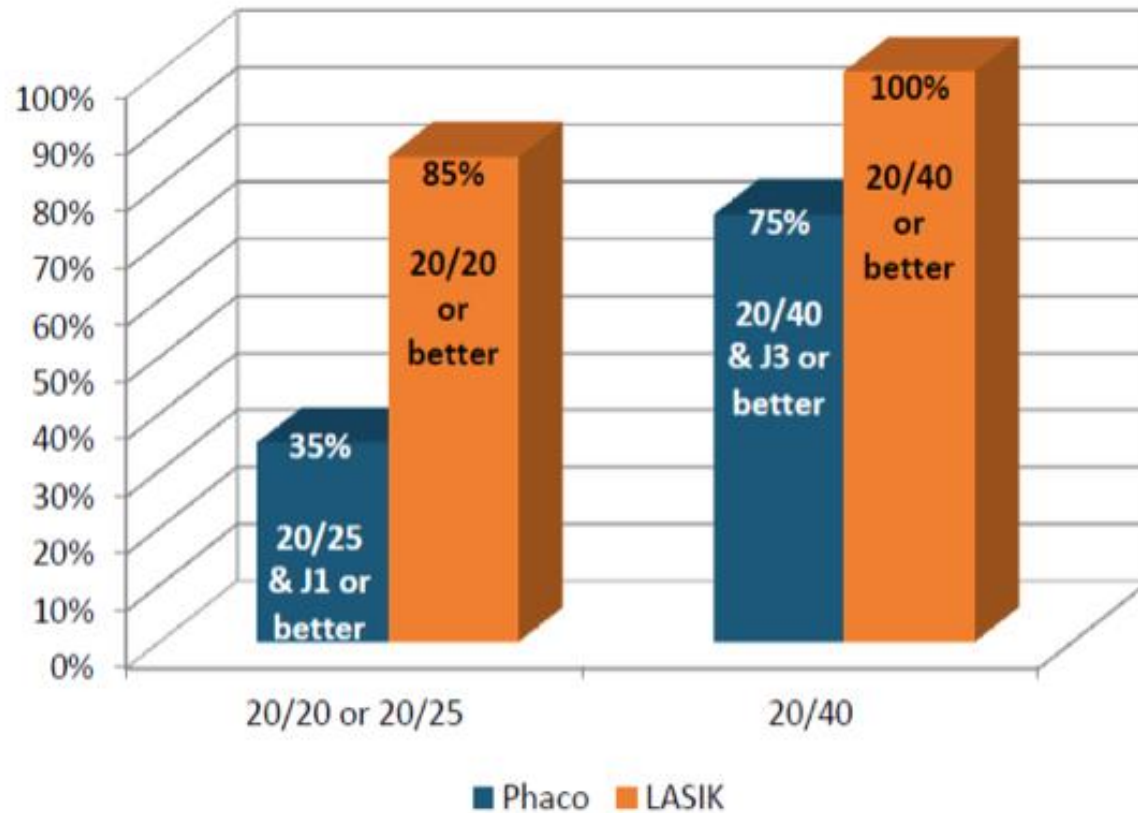


# Surgical Techniques

- *“Excuse me Doctor, is it done with the laser?”*

# Laser Refractive Cataract Surgery

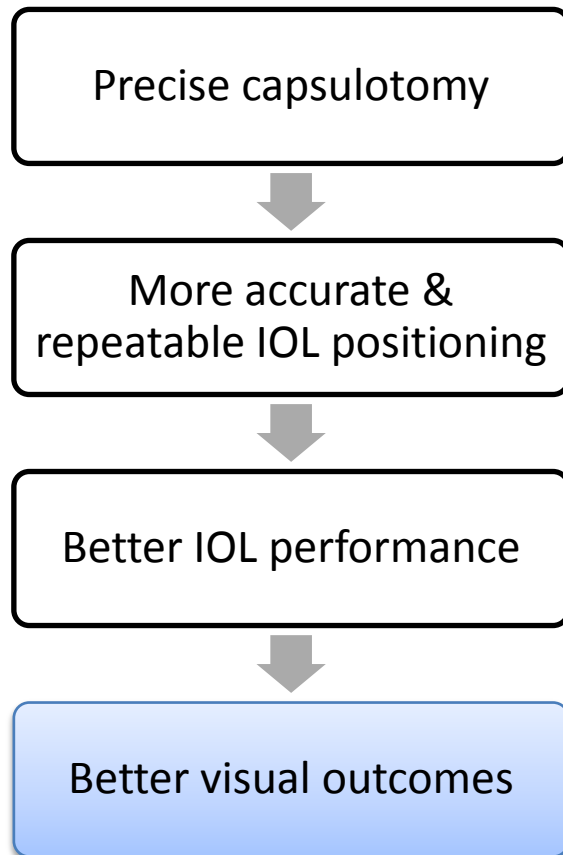
# The Need for Improvement



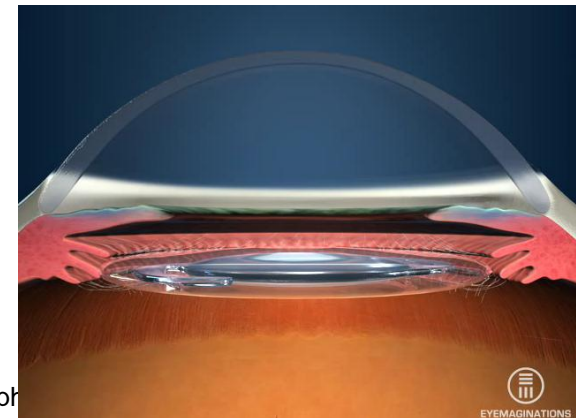
Source: Steve Slade, MD

\* Adapted from FDA clinical data for  
Crystalens and Wavelight Trials

# Refractive Results: A more precise capsulotomy



- The size, shape, and positioning of the capsulorhexis is a key determinant for effective lens position<sup>1</sup>
- A 0.5mm axial plane deviation from intended ELP results in 1D of refractive error<sup>2</sup>



<sup>1</sup>Yanoff M, Duker J: Ophthalmology: Expert Consult 3<sup>rd</sup> edition, Mosby, 2008.

<sup>2</sup>Cekic O, Batman C: The relationship between capsulorhexis size and anterior chamber depth relation. Oph

# Limbal Relaxing Incisions

## Traditional, Handheld Diamond Knife

- Manually executed by “tracing” corneal marks
- Inconsistent depth control
- Unpredictable effect due to imprecise wound architecture and depth

# Arcuate Incisions

# Frosting on the Cake

- Preop -10.50 = -1.00 xo 180
- One day post op: plano sc 20/20!

# Intra-stromal vs. Penetrating Astigmatic Keratotomy

- Less invasive
- No epithelial injury
- Quick procedure
- Fast visual recovery
- Minimize loss of corneal sensation
- Preserve ability to create a flap later



# What does the future hold?

- Femtosecond cataract lasers exist in 34 countries
  - Each with their own financial and regulatory framework.
- Just as femtoLASIK coexists with mechanical microkeratomers, so does LACS coexist with manual surgery. There is a place for both, but the more precise and expensive technology will eventually dominate.

# Believe in the Technology

- Go watch a case
- Truly understand the implications of
  - Safer
  - Better Refractive outcomes
- What does that mean for your patients and how does that reflect your practice

# Fee Discussion

- Hearing fees from you validates
- Mentioning fee does not make you a salesperson
- Should not put you on the defensive
- The fee is the fee. Need not apologize.
- Added value costs extra
- “We offer financing”

# Fees

- Monofocal LenSx: (for astigmatic correction)
  - \$1500
- Toric Lens (no LenSx):
  - \$1400
- Toric Lens (with LenSx):
  - \$2200
- Restor Lens (always with LenSx):
  - \$3300

# IOL discussion and selection

- 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

# Monovision an option

- Only if they are a successful monovision patient for a good period of time

# “Continuous Vision”

- Do you dream of freedom from reading glasses and bifocals? Continuous Vision from XYZ Eye Associates may be right for you. Our goal is and has always been to provide all of our patients with their most optimal vision possible, regardless of their age and eye condition.

- Specially developed to provide blended, functional vision at all distances, Continuous Vision may be the best option for many cataract patients and individuals with poor reading vision who wish to leave their glasses (and money) behind

- The difference between Monovision and Continuous Vision =



# Baby Boomers – Here They Come!

- 78 Million born between 1946 and 1964
- Our Patient Population is getting older
  - 1996      Average Age of Baby Boomer=40
  - 2006      Average Age of Baby Boomer=50
  - Every 7 seconds a Boomer reaches 51 yrs.

# Presbyopia: The Start of Middle Age

- ✓ **EVERYONE** hates presbyopia
  - ✓ **Significant impact on Quality of Life**

**Be sure that presbyopes are informed of all the available options**

# The Choices in High Technology or “Premium” Lenses, 2013

- Multifocal / Accommodating IOIs

**Accommodating  
(Crystalens)**



**Diffractive Multifocal  
(Restor and Technis)**

# Don't Make a Spectacle

- 53 WF Pharmacist
- 6 months of “difficulty focusing” and glare at night while driving
- Hates glasses, wants to see without them...works on a computer constantly
- Rx: -3.00 sph
- -1.75 = -1.25 x 165
- 20/40 OD and OS

# Plan

- Cat ext OU with Restor IOL's
- LRI OS for cylinder (pre LenSx case)
- Great VA dist and near, and intermediate sc  
20/20 and J1 OD/OS

# Coming “Soon”

- TORIC RESTOR

# TECNIS<sup>®</sup> Multifocal Acrylic IOL Model ZMA00 Specifications

- + 4 add so intermediate an issue
- People do well with it for the most part

# Crystalens

- Our experience:  
a lot of  
enhancements  
needed due to  
lack of  
predictability of  
final visual  
outcome
- Still being used,  
limited place



# Mix and Match?

- Was done a lot early on, not so much now
- Restor 3.0 has eliminated the need for it

# Who Should You Discuss Premium Lenses with?

- **Everyone!**
- **Tell the non candidates why they are not**
- **Document in chart**
- **Embarrassing if the MD is the first person**

# Patient Resources

- Website
- Brochures
- Surgeon should get everyone to sign something that says they were given all options

# Counseling IOL Patients

# Malpractice?

- “Will I be at risk if I tell the patient about the lens and they end up not doing well”
- ODs are at a higher risk from “failure to inform” suits than from misdiagnosis suits

# Using the Right Terminology

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

# Good Candidates?

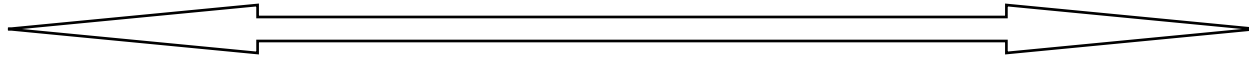
- Cataract patient presents with one pseudophakic eye (monofocal lens) and a cataract in the other eye, or a cataract in one eye only
- Patient presents with s/p lasik ou, now has cataracts ou
- Patient has  $>2$  diopters of cylinder

# 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



1. Are you interested in seeing well **at distance** without glasses after surgery?  
 **Prefer no distance glasses.**      **Not important to me. I wouldn't mind wearing distance glasses.**
2. Are you interested in seeing well **at near** without glasses after surgery?  
 **Prefer no reading glasses.**      **Not important to me. I wouldn't mind wearing reading glasses.**
3. Zones of Vision.



**We divide vision into 5 “Zones of Vision”**

<b>Near</b>					<b>Far</b>
<b>Zone 1</b>	<b>Zone 2</b>	<b>Zone 3</b>	<b>Zone 4</b>	<b>Zone 5</b>	<b>Zone 5</b>
<b>(12-20 in)</b>	<b>(2-4 ft.)</b>	<b>(6-20 ft.)</b>	<b>(20-100 ft.)</b>	<b>(100 ft.+)</b>	<b>(100 ft.+)</b>
Newsprint	Headlines	Indoors	Day-far	Night-far	
Phone book	Computer	TV	Driving	Night	
driving					
Maps	Menus	Cooking	Golf	Movies	
Sewing	Price tags	Cleaning	Road signs	Star gazing	

Which group of “Zones of Vision” is the **most** important group to you? Please choose **only one** of the following three options of Group A, B or C:

[www.crstoday.com](http://www.crstoday.com) **“dell survey”**

# Show Me the Money!

- All Medicare Patients have the option to upgrade to a premium lense for treatment of presbyopia or astigmatism.
- Patients may pay the differential to upgrade to this new technology, effective with balanced billing act of May 2005

# Cost

- Balance billing allows us to charge patients over and above Medicare
- Omni Professional fees: **\$1500**
- ASC: **\$900** which covers cost of the IOL
- TOTAL out of pocket: **\$2400 per eye**

# OD CoManagement Fee

- Medicare fee by filing modifier
- Portion of Restor fee to OD
- Arrangement and amount depends on the surgeon/practice

# The Money Talk

- *Don't apologize for the cost of the ReSTOR surgery over typical cataract surgery*
- *It is more valuable, an advance in technology, and requires more on the part of the surgeon and the co-managing doctor of optometry*

# 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  $\times$  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

s/p IOL OS 7/15/13 Dr. Digby  
s/p IOL OD 7/26/13 Dr. Digby



s/p TORIC IOL OD 8/6/13 Dr. Bierly

# 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

And not to be outdone.....once a day

Nevanac = Ilevro

# 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

## BACK TO BASICS

- We worked long and hard to see cataract post-ops, so let's see them!
- Code 66984: cat surgery with IOL
- Code 66982: cat surgery with IOL complex
  
- Modifier 54 filed by surgeon
- Modifier 55 filed by doctor of optometry

# 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

# Go for the Gold!

- Proper cataract evaluations
- Working with high quality surgeons
- Keep up with new technology
- Premium IOLs: to be continued