

Partner with the Patient: *Presbyopia-Correcting IOLs*

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Patient Evaluation

- This is *refractive* surgery more than *cataract* surgery
 - *We're not in Kansas anymore, Toto*
- Implications for the surgeon's approach and management
- Implications for a patient's expectations

Understand Your Patient's Expectations

- Assess vision function goals:
 - Distance
 - Intermediate
 - Near
- Determine frequency and importance of dim and bright light activities
- *Talk with the patient!*

Candidates

- Assess personality
- Accurate IOL measurement
- Measure pupils in scotopic and mesopic lighting
- <1D cyl
 - Corneal topography!
 - Be comfortable with LRIs
- No macular or other vision-limiting pathology

Complications

- The best management is avoidance
- Meticulous surgical technique is assumed
 - Thorough cortical clean-up
 - Correct size centered rhexis
 - Correct IOL power
- Surgical and post-op complications will still occur
 - Need to discuss complications and the consequences *pre-op*

Key Points

- Allow time between 1st and 2nd eye surgery to assess satisfaction
 - *A change from my previous strategy*
- Listen to the patient's perception of the first eye
- When there are problems, convey sincere concerns as a partner with the patient
- Educate and remind patient about neuro-adaptation

The Role of the Visual Cortex

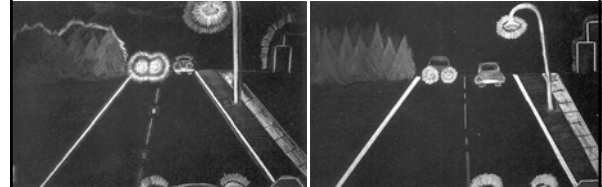
Real-time, high speed image processing and streaming video in a lightweight portable computer with a hard carrying case and a large dedicated energy supply

- Improve edge definition
- Reduce out-of-focus aberrations
- Deliver functional simultaneous distance and near vision

Glare: Role of Adaptation

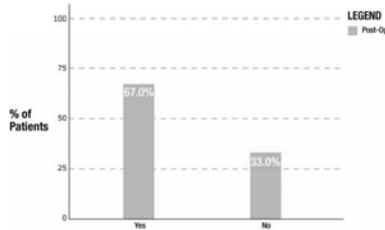
Initial

3 months post-op



Improvement with Halos Since Right After Surgery

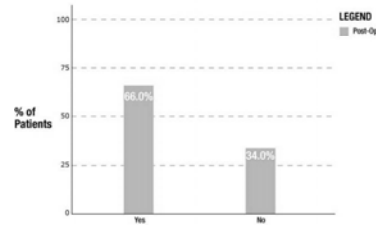
67.0% of patients have reported improvement with halos between the 6-week and 6-month follow-ups (n=98)



Data courtesy of George Beiko, MD

Improvement with Glare Since Right After Surgery

66.0% of patients have reported improvement with glare between the 6-week and 6-month follow-ups (n=98)



Data courtesy of George Beiko, MD

Patient Selection: Neuro-adaptation

- Motivation?
- Role of age?
- Personality?

A process that continues for at least 3 months and in some cases appears to have continued for at least 1 year

Take Home Point #1

- Only implant a presbyopia-correcting IOL in a patient who prioritizes functional vision without glasses

Take Home Point #2

- The patient must both *hear* and *understand* that the goal of the presbyopia IOL is a wider range of functional vision without glasses, and that glasses may still be needed for a few particular activities

Take Home Point #3

- Do not place a presbyopia-correcting IOL in an eye that already has compromised visual function from another source
 - Significant macular disease
 - Drusen alone not a contraindication
 - Optic neuropathy
 - Amblyopia
 - Advanced glaucoma
 - Controlled glaucoma not threatening fixation is OK

Take Home Point #4

- Non presbyopia-correcting candidates have premium options
 - Standard of care is a clear aspheric IOL that targets zero spherical aberration (SA)
 - Monovision or mini-monovision
 - Astigmatism management through LRI or LVC
 - Certain patients require highest contrast vision of clear aspheric IOL and zero SA:
 - Macular Disease, Optic Neuropathy, Amblyopia, Advanced Glaucoma

Take Home Point #5

- Remember that you are now a *refractive surgeon*
 - Assessment
 - Planning
 - Post-op management

Conclusions

- Under promise
- Over achieve

- Undersell
- Celebrate success