Sight Restored, Life Transformed: The Power of Modern IOLs

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Description

For almost all patients, they have a "refractive" goal after cataract surgery. Whether it be cataract surgery or a refractive lens exchange (RLE), after the crystalline lens comes out, a light refracting implant is inserted back into the eye. This lecture aims to provide an in-depth update on refractive cataract surgery including, pre-operative preparations and measurements, intraoperative tools including newer intraocular lenses (IOLs), and post-operative management.

Learning Objectives

- Review the screening process for potential refractive cataract surgery candidates, and answer the question, “What makes a good candidate?"
- Gain insight with the evolving IOL options for a patient who desires a refractive lens exchange (RLE) or refractive cataract surgery outcome.
- Discuss the post-operative plan and follow-up for refractive surgery patients, and how to enhance success

Outline

I. Introduction into the changing landscape in cataract surgery. Trending now #hashtags

A. Cataract surgery demographics with age of surgery getting lower and number of surgeries per year.

B. Discuss the patient goals based on being a more active geriatric generation

C. Cataract surgery time-line showing the advancements over time.

D. Discuss how “trending now” is really two categories of “less dependence on glasses” and “ease of cataract surgery.” Income based age changes.

E. Discuss how educate patients on IOL options

II. Premium cataract surgery with lenses and lasers

A. Percentage of patients with astigmatism. Discuss corneal relaxing incisions, AK’s and LRI’s, their differences and applications with femto, and range of correction.

B. Toric IOL's- picture of AMO toric vs. Alcon Toric.

   a. IOL powers for torics and diopters of correction

   b. Discuss toric IOL calculation

   c. Research by Slingsby on Lenstar vs. Topo vs. Cassini vs post-op MRx

   d. Residual astigmatism/IOL rotation

C. Optic Adjustable IOL (Light Adjustable Lens- LAL)-

   a. The only FDA approved optic adjustable lens inside the eye secondary to photosensitive macromers

   b. Discuss the patient experience and process

   c. FDA pivotal data

D. Extended Depth of Focus (EDF) lenses

   a. Do no split light but rather elongate the clear vision zone.

   b. Different types and where they fit.

   c. "Who" is our patient for EDF lens

E. Pinhole optics IOL- Apthera

   a. True EDF technology with a "mask" or "on-lay" in the lens

   b. Primarily used for highly aberrated corneas

F. Diffractive Multifocal/Trifocal IOLs

   a. Review diffractive optics and the pro's and con's

   b. Discuss EDF/MF technology with Odyssey

   c. Discuss true Trifocality with PanOptix

   d. Review non-sponsored data confirming the outcomes of these IOLs.

III. Post-operative optimization for premium implant patients

A. Listen first to find the patients area of concern.

B. Evaluate words used for dysphotopsias after surgery. How can we use the patient concern to help in treatment.

C. Algorithm to care for these patients including tear film (TF) optimization, yag laser, and then refractive enhancement.

IV. Conclusion / Q&A

A. How do we as optometrists provide our patients top-notch perioperative care in the cataract surgery space.

B. What are the market trends

C. Discuss visual acuity vs. visual quality.

D. Questions