LESS THAN PERFECT OUTCOMES AFTER UNEVENTFUL CATARACT SURGERY: WHAT ARE WE MISSING?

IC: 18-307

Chief Instructor: Dr. Arup Chakrabarti
Date: 19th April, Saturday, 2015
Time: 01:00 to 02:30 PM
Location: 7B

Financial Interest: Nil

LESS THAN PERFECT OUTCOMES AFTER UNEVENTFUL CATARACT SURGERY: WHAT ARE WE MISSING???

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WHAT ARE WE MISSING?

1. PATIENT SPECIFIC FACTORS
2. OCULAR SURFACE DISEASE
3. KERATITIS MEDICAMENTOSA
4. REFRACTIVE SURPRISES
5. EARLY PCO
6. DYSPHOTOPSIA
7. SUBTLE CORNEAL PATHOLOGIES
8. IOL DECENTRATION
9. PROBLEMS WITH MF IOLs
10. SUBTLE MACULAR PATHOLOGIES
**How Do We Manage?**

**PCO ASSESSMENT**

- S/L Biomicroscopy
- Retroillumination
- Distant Direct Ophthalmoscopy
- Direct Ophthalmoscopy
- Clarity of Fundus View

**PCO PROPHYLAXIS**

- Complete Removal of LEC
  - Surgical
  - Pharmacologic
  - Immuological
  - LCOP (Laser Capsular Opacity Prevention)

Financial Interest – NIL
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Laser Capsular Opacity Prevention (LCOP)
ARC Nd:YAG laser photolysis

PCO PROPHYLAXIS
– Complete Removal of LEC
  – Surgical
  – Pharmacologic
  – Immunologic
  – LCOP; Laser Capsular Opacity Prevention
– Inhibition of LEC Prolifer / Migration


**PCO PROPHYLAXIS**

- Capsulorrhexis: Regular, Round, Well-cent., 360° IOL Optic Overlap
  - Capsular Sequestration
  - 'Shrink Wrap' the Capsule Around IOL Optic

**Hydrodissection:** Thorough Cortical Cleaving Hydrodissection

**I & A:** Thorough Cortical Clean – up to ↓ S-Ring

**Role of Posterior Capsular Polishing:**

**Role of Anterior Capsular Polishing:**

- Controversial
  - Many Would Like to Avoid It

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**Proper Sizing of the Capsulorrhexis**

- Capsulorrhexis Diameter = 1 mm Less than IOL Optic Diameter
- ≥ 4 mm

Verus Capsulorrhexis Device® (Mile High Ophthalmics, Denver)
Malik Y. Kahook... JCRS 2014(May)

Femtorhexis

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**PCO PROPHYLAXIS**

**IOL ISSUES**

- IOL Optic Geometry
  - Square, Truncated Edge
  - Optiedge

- Maximal IOL Optic Contact
  - Posterior Angulated Haptic
  - Post. Convexity of the Optic

- Biocompatible IOL Material
  - ↓ Stimul. of Cellular Proliferation

- Small Haptic-Optic Junction

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**PCO : MANAGEMENT**

**YAG Capsulotomy Definitive**

Decision More Complex in a MF IOL Pt

? Cause of Visual Disability

- Early PCO
  - Other Mechanism
  - Early PCO + Other Mechanisms

- YAG Capsulotomy for Early PCO (When PCO wasn't the Cause)
  - Nonimprovement of Symptoms
  - Complicate Further Mx if IOL Exchange is Needed

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**MANAGEMENT : Post YAG Capsulotomy**

**Well Centered + Adequate Size**

- Topical Steroids
- NSAIDs
- Topical IOP Lowering Agents

Guard Against CME & other Retinal Complications
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CONCLUSION: MANAGEMENT of EARLY PCO

• “Early PCO” Assumes Significance in the Context of MFIOL
• Prophylaxis – Good Surgical Technique, Strategy - Appropriate IOL Design
• YAG Capsulotomy is Definitive but the Decision Process is Complex