Surgical Management of Malpositioned IOLs and Subluxated Cataracts

Samuel Masket MD
Clinical Professor - UCLA
Los Angeles

Disclosures: Samuel Masket MD

G Consultant Alcon Laboratories
G Consultant Power Vision
G Consultant Ocular Therapeutics
G Consultant WaveTec
G Speaking Honoraria/Royalties Haag-Streit
G Speaking Honoraria MST
G Royalties Morcher

Subluxated Cataracts: Issues

G Etiology of Zonulopathy - progressive?
G Extent of Zonulopathy
G Associated Ocular Conditions
  G Cataract type
  G Glaucoma
  G Iris/Pupil
  G Vitreous herniation
  G Posterior segment
G The Capsulotomy - key
When To Place a CTR

- "At late as you can, but as early as you must" – Ken Rosenthal
- Capsule hooks allow bag contents to be emptied and avoid dealing with CTR issues if the capsule tears; CTR interferes with cortex

Employ capsule support devices:
- Standard Iris hooks
- Mackool CSS
- MST
- Yaguchi-Kozawa

- Place CTR and IOL of choice

Yaguchi-Kazawa Double Hooks

- 2 point fixation for each hook
- Ends are smooth
- 5 per package
- Available only in Japan
- info@handaya.co.jp
MST Hooks

- 4 per package
- Broad capsule contact
- Reaches to periphery of bag
- Keeps posterior capsule on stretch
**Malpositioned IOLs - Etiology**

- **Early**
  - Iatrogenic – capsule rupture, bag missed by one or both haptics, iatrogenic zonulysis, IOL haptic damage
  - Endogenous zonulysis
  - Previous trauma

- **Late**
  - Capsule contraction and phimosis with zonulysis
  - PEX, Uveitis, Trauma, ROP, RP
  - Scleral suture hydrolysis

**Malpositioned IOLs - Management**

1. Work under low light
2. Microsurgical Instruments
3. Reopen Capsule-Bag
4. Stabilize/Capture IOL
5. “Basket” sutures
6. Capsule Capture
7. Vitrectomy - Anterior/Pars Plica
8. Cutting/folding IOLs for removal
9. McCannel and Seipser (Iris) Sutures
10. Scleral Fixation
   - Sutures - “Lasso”
   - “Glue” Technique

**Microsurgical Instruments**
Basket Safety Suture To Stabilize Loose IOL – Post Vitrectomy
Materials

- Suture – 10-0 Prolene
  - Ethicon STC-6
  - Bend 15 degrees
- Needle:
  - 27 gauge
  - 30 gauge
- A/C maintainer

High Myope S/P PPV/buckle
Subluxated PMMA IOL - Zonulopathy