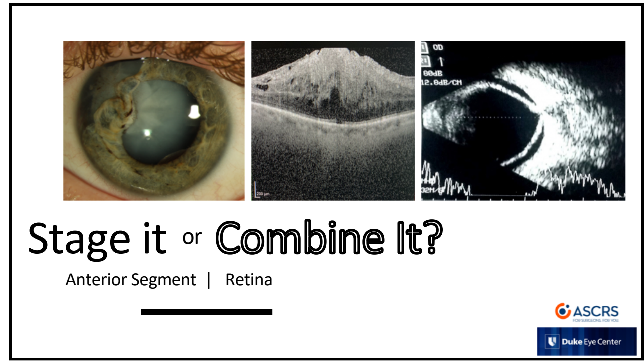
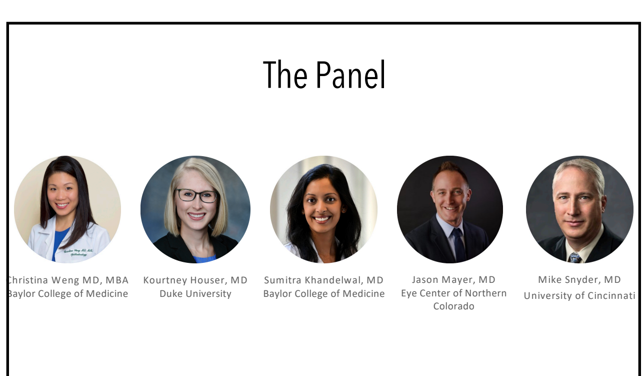
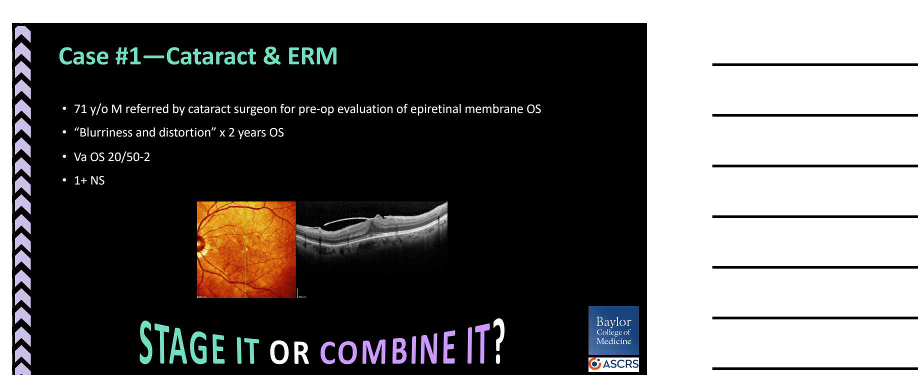

Stage it or Combine It?
Anterior Segment | Retina
ASCRS
Duke Eye Center


The Panel
Christina Weng MD, MBA
Baylor College of Medicine
Kourtney Houser, MD
Duke University
Sumitra Khandelwal, MD
Baylor College of Medicine
Jason Mayer, MD
Eye Center of Northern Colorado
Mike Snyder, MD
University of Cincinnati


Case #1—Cataract & ERM
71 y/o M referred by cataract surgeon for pre-op evaluation of epiretinal membrane OS
"Blurriness and distortion" x 2 years OS
Va OS 20/50-2
1+ NS
STAGE IT OR COMBINE IT?
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Case #1—Cataract & ERM

- Underwent phaco/TB/IOL (monofocal) + 25g PPV/IVK/MP OS
- Va OS 20/25+2 at POM #1, very happy with vision—"not perfect, but much better"

We COMBINED IT!

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Case #1—Cataract & ERM

- Tease out symptoms—general blurriness vs. metamorphopsia/micropsia?
- Shared decision-making
  - 3 options: 1) Do nothing, 2) Sequential surgery (ERM/cataract first), or 3) Combination surgery
  - Consider overall risk profile (e.g., myopic eye, general health)
- Set expectations appropriately for combined surgery
  - Longer visual recovery
  - With retinal pathology, visual outcome may not be "perfect"
- Pearls for the retina surgeon:
  - Limit retrobulbar block
  - Discuss territory/plan with your co-surgeon
- Pearls for the cataract surgeon:
  - Consider retinal pathology when selecting IOL
  - Do not aggressively hydrate wounds
  - Suture corneal wound no matter how well-constructed

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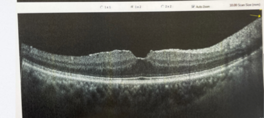
CASE 1

- 65 year old history of progressive decreased vision referred for cataract evaluation
- BCVA OD: 20/50
- BCVA OS: 20/30

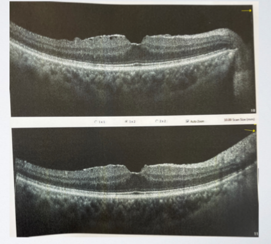
CASE 1

- 65 year old history of progressive decreased vision referred for cataract evaluation
- BCVA OD: 20/50
- BCVA OS: 20/30



CONSIDERATIONS

- Pre Op testing:
  - Is OCT Macula recommended? Interpretation?
- Surgical Plan
  - Stage it or combine it?
- Post op Plan
  - Follow up, refractive error?



CASE 2

- 62 year old history of known ERM, referred from retina for CE/IOL
- History of high myopia LASIK and myopic degeneration

CASE 2

- 62 year old history of known ERM, referred from retina for CE/IOL
- History of high myopia LASIK and myopic degeneration

Pre Op: 20/70

CASE 2

- 62 year old history of known ERM, referred from retina for CE/IOL
- History of high myopia LASIK and myopic degeneration

Pre Op: 20/70

Post Op: 20/50

CASE 2

- Worsened ERM with VMT
- Refractive Outcome: Goal -1.50, ended up -3.50
- Patient wants better distance vision; I want the retina to look normal again

CASE 2

- Worsened ERM with VMT
- Refractive Outcome: Goal -1.50, ended up -3.50
- Patient wants better distance vision; I want the retina to look normal again

- Stage it or combine it: PPV + IOL exchange

Case #2—Cataract & Macular Hole (or RD)

- 69 y/o F with sudden decrease in vision and central scotoma OD
- BCVA OD 20/100 (from baseline of 20/50 at her last visit where 2+ NS OD was noted)
- 2+ NS

STAGE IT OR COMBINE IT?

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Case #2—Cataract & Macular Hole (or RD)

- Underwent 25g PPV/IVK/BBG/MP/AFX/20% SF6 OD
- BCVA 20/100 → 20/50 → 20/100 over next 3 months as cataract progressed to 3+ NS
- Following CE/IOL, Va improved to 20/25

I STAGED IT!

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Case #2—Cataract & Macular Hole (or RD)

- When a tamponade is planned, I prefer to stage surgery unless visualization is an issue
  - Lens provides a better A-P barrier
  - Gas can prolapse IOL anteriorly; silicone oil can migrate anteriorly in pseudophakes
- Set expectations appropriately
  - Tell the patient that they will need another surgery in the future
  - Prepare them for a visual "roller coaster"
  - Remind them that visual outcome may not be "perfect", but that you expect them to see better
- Pearls for the retina surgeon:
  - Tell cataract surgeon if PC could be violated
  - Counsel patient on small risk of FTMH re-opening following cataract surgery
- Pearls for the cataract surgeon:
  - Prepare for potentially weak zonules in retina surgery/injection patients
  - Gently inject trypan blue which can migrate posteriorly in post-vitrectomized eyes
  - Posterior capsule may be floppier

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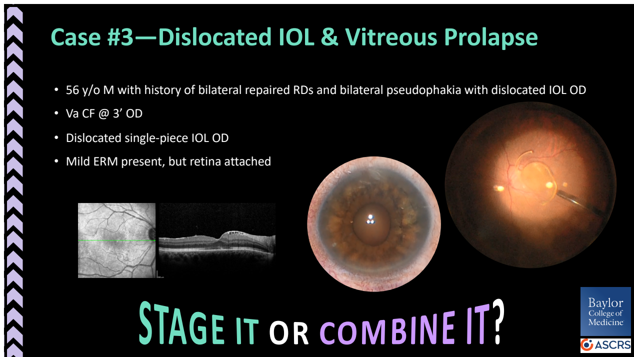

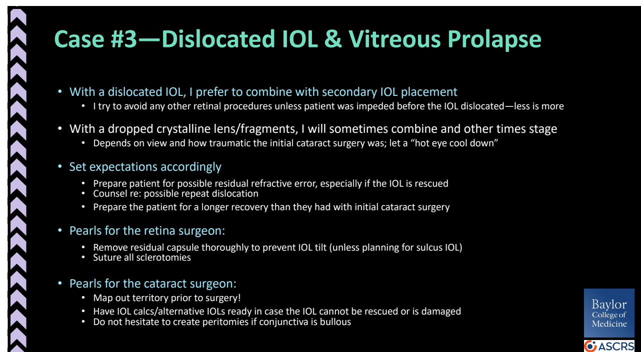
Case #3—Dislocated IOL & Vitreous Prolapse
With a dislocated IOL, I prefer to combine with secondary IOL placement
I try to avoid any other retinal procedures unless patient was impeded before the IOL dislocated—less is more
With a dropped crystalline lens/fragments, I will sometimes combine and other times stage
Depends on view and how traumatic the initial cataract surgery was; let a "hot eye cool down"
Set expectations accordingly
Prepare patient for possible residual refractive error, especially if the IOL is rescued
Counsel re: possible repeat dislocation
Prepare the patient for a longer recovery than they had with initial cataract surgery
Pearls for the retina surgeon:
Remove residual capsule thoroughly to prevent IOL tilt (unless planning for sulcus IOL)
Suture all sclerotomies
Pearls for the cataract surgeon:
Map out territory prior to surgery!
Have IOL calcs/alternative IOLs ready in case the IOL cannot be rescued or is damaged
Do not hesitate to create peritomies if conjunctiva is bullous
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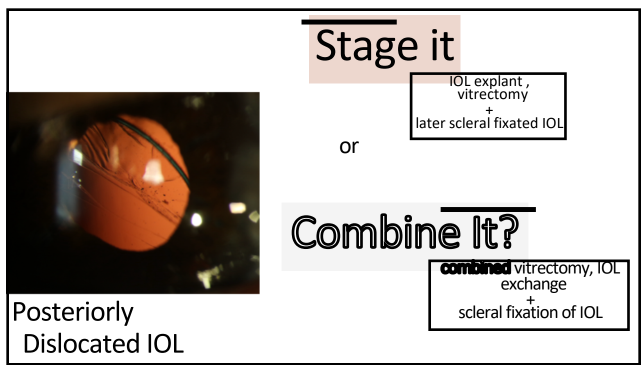
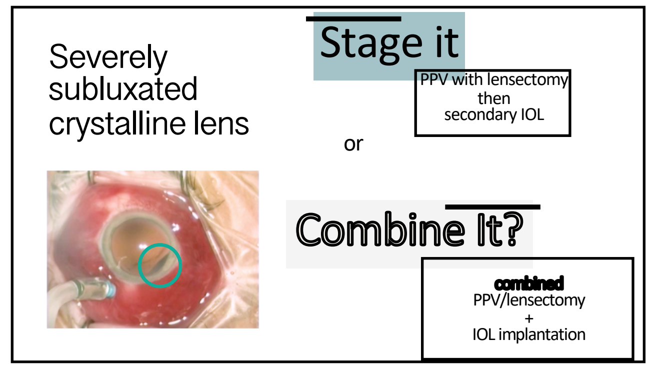
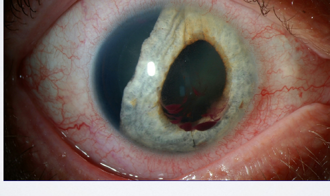

Stage it
IOL explant , vitrectomy
+
later scleral fixated IOL
or
Combine It?
combined vitrectomy, IOL exchange
+
scleral fixation of IOL
Posteriorly Dislocated IOL

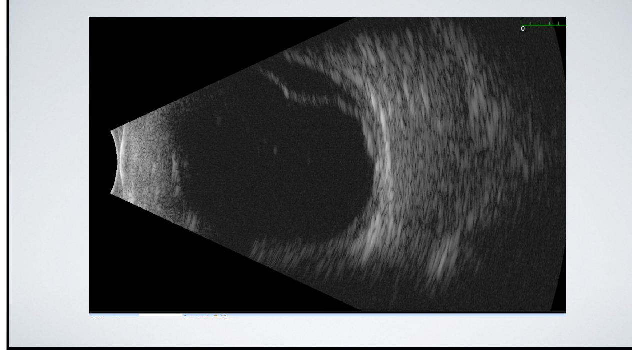

Severely subluxated crystalline lens
Stage it
PPV with lensectomy
then
secondary IOL
or
Combine It?
combined
PPV/lensectomy
+
IOL implantation

CASE 3

- 55 year old zip lining and hit a pole
- Immediate decrease in vision
- Saw ophthalmologist: 70% hyphema, IOP 35, no view to the retina
- B scan initially: Normal

CASE 3





CASE 3

- RD repair, possible air/gas/oil with possible laser
- Iris repair
- Lens extraction
- Placement of IOL with sutures, segments, scleral fixation

Stage it

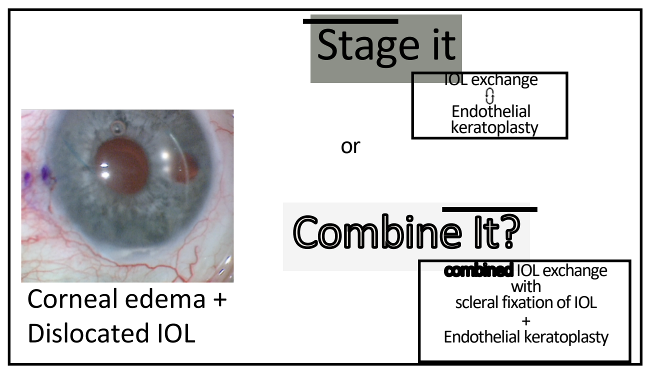
RD repair
then
custom iris
prosthesis

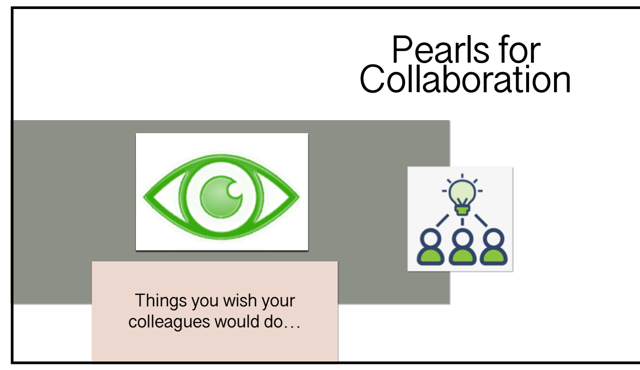
or

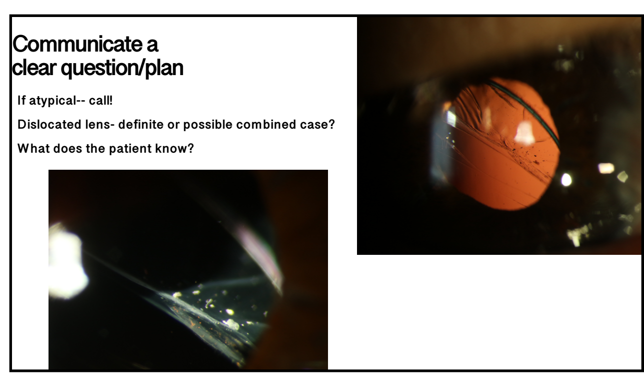
Combine It?

combined
RD repair
+
custom iris prosthesis

Retinal Detachment
+ Iris defect


Stage it
IOL exchange
Endothelial
keratoplasty
or
Combine It?
combined IOL exchange
with
scleral fixation of IOL
+
Endothelial keratoplasty
Corneal edema +
Dislocated IOL


Pearls for
Collaboration
Things you wish your
colleagues would do…

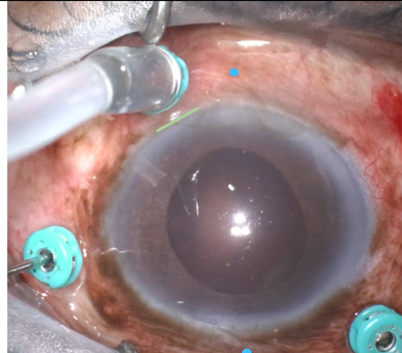

Communicate a
clear question/plan
If atypical-- call!
Dislocated lens- definite or possible combined case?
What does the patient know?

Plan trocar placement

Optimize for both surgeons

Plan approach (superior vs temporal) for each surgeon

Plot trocar placement and incisions



Advice for combined cases

- Don't promise a combined/staged approach before the patient sees the co-surgeon
  - Separate pre-ops and consents should be done by each
- Discuss all risks with patient so that the consenting process is balanced
- Plan logistics, surgical plan, billing, and post-op visits in advance
  - Try to alternate or align post-op visits if possible
- Defer post-op instructions and drops to one surgeon to avoid confusion
- Inter-provider communication is key!
- Send patient back to referring provider once stable, if applicable

ASCRS