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Practice Development Educational Series

Strategies for Solving Contact Lens Complications

Practice Development Educational Series

Topic	Date	Time	Speaker
Scleral Lens Design and Fitting: The Basics	Available for viewing online		Maria Walker OD, FSLs, FAAO
Getting the Most out of Presbyopic Contact Lens Options	Available for viewing online		Thomas Quinn OD, MS, FAAO
Strategies for Solving Contact Lens Complications	Thursday, September 17, 2019	9-10PM ET	Clark Chang OD, FAAO
Practice Management Tips for Billing and Coding and other Issues to build your Specialty Contact Lens Practice	Thursday, December 12, 2019	9-10PM ET	Stephanie Woo OD, FAAO, FSLs



Clark Chang, OD, MSA, MSc, FAAO
is Director of Cornea Specialty Lenses at Wills Eye Hospital - Cornea Service and Director of Clinical Services at TLC Vision.

Dr. Chang has over a decade of clinical research experiences in corneal crosslinking and other advanced treatment methodologies.

He publishes extensively in clinical management of keratoconus and other corneal pathologies, innovative uses of specialty contact lenses, and modern applications of refractive surgery technologies. Given the unique academic, research and clinical backgrounds, Dr. Chang frequently lectures in U.S. and international educational conferences.

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Financial Disclosure

■ Employment

- Wills Eye, Cornea -- Director, Cornea Specialty Lens
- TLC Vision – Director, Clinical Services



■ Honoraria/Research Support/Travel Grants

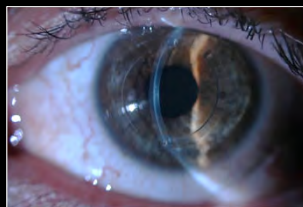
- Alcon
- Allergan
- Avedro
- SynergEyes
- Valley Contax
- Alden Optical
- AMO
- Oculus
- Sun Pharma

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Solving CL Fitting (CLF) Complications Beyond the Era of One Size Fits All!



RGP



Soft KC



Piggyback



Recessed CL System



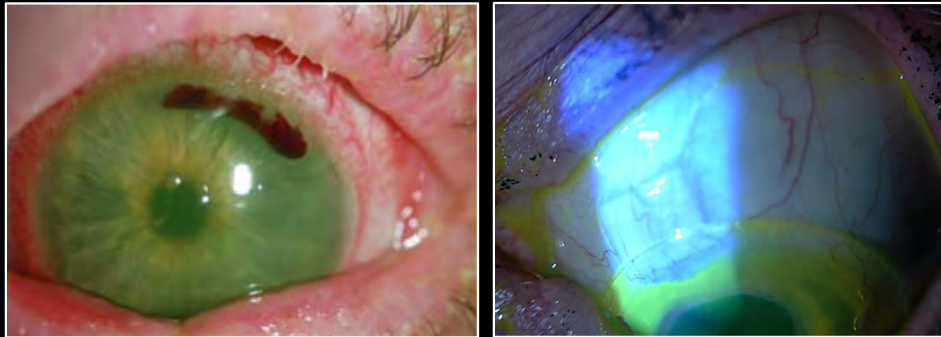
Hybrid



Scleral

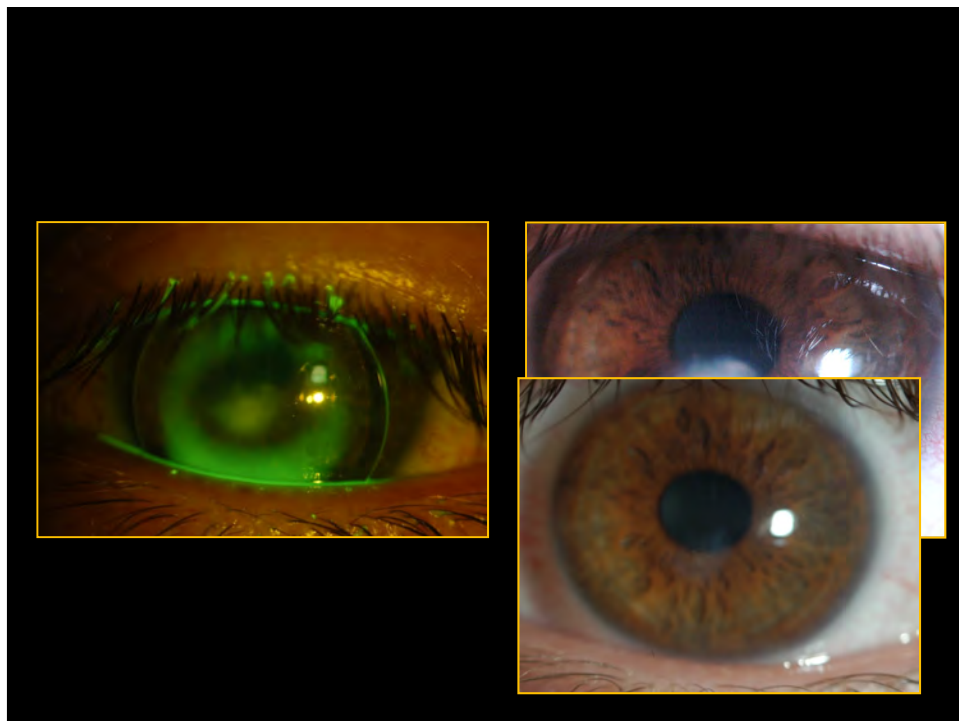
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Solving CL Fitting (CLF) Complications Beyond the Era of One Size Fits All!



Courtesy, Lynette Johns, O.D.

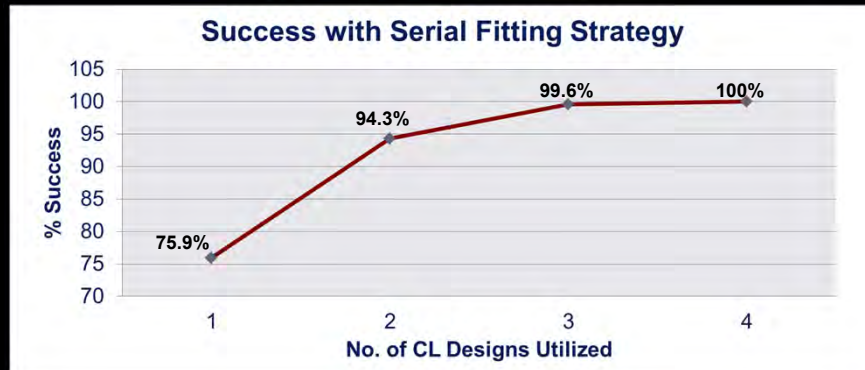
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Solving CL Fitting (CLF) Complications Beyond the Era of One Size Fits All!

Overall Success Rate = 95.1%

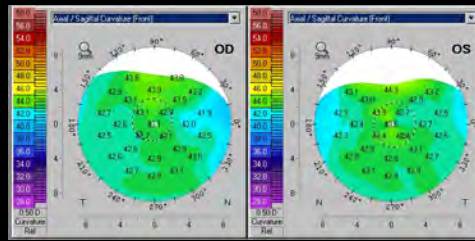


Clark Chang, Angela Shin, & Peter Hersh (Unpublished Data)

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Solving CL Fitting (CLF) Complications Case #1: Best of Both Worlds

- 55 YO, Asian, F, Hospital Administrator
- Mod-high myopia with full time CL wear
- Hx: CLs x 35+ Yr, Hydrogel SCL in early 80's
 - Switched to GPs due to allergy; Good DVA & Acceptable comfort
 - 1 Yr ago, refit in **Monthly SCL (Monovision, +1.50D Add OS)**
 - Overall, **Soft CLs are more comfortable, BUT worse IVA & NVA**
 - d/c soft CLs & resumed GPs
 - Increased uses of Reading Rx
- Plan: Discussed MF
 - GP vs Hybrid



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Strategies for Solving Contact Lens Complications

Solving CLF Complications

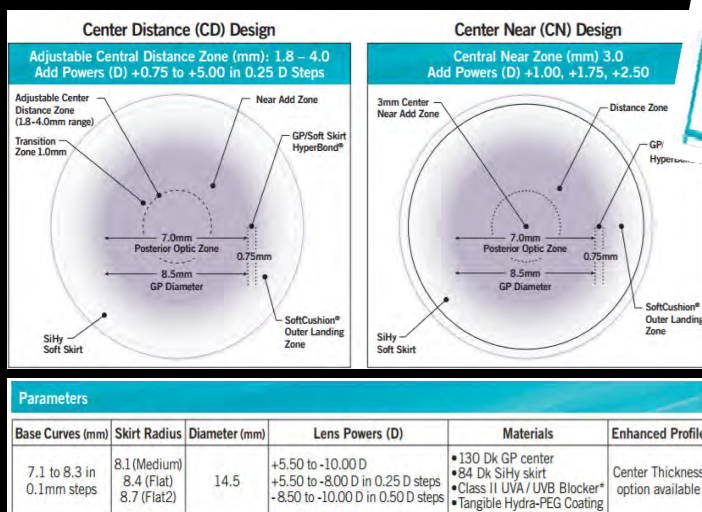
Case #1: Best of Both Worlds

- Old MR (Oct 2017)
 - OD -6.75 -0.75 x090
 - OS -6.50 -0.75 x100
- Ks (Pentacam)
 - OD 43.50/42.50 x99.6
 - OS 43.50/42.70 x108.7
- Dominance
 - OD
- New MR
 - OD -5.25 -1.50 x077 20/20
 - OS -5.25 -1.00 x090 20/20
- Add Power (Spectacle)
 - OD +1.75 20/20 (J1+)
 - OS +1.75 20/20 (J1+)
- Pupils
 - Photopic: 3.5mm, OU
 - Mesopic: 5.0mm, OU

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Solving CLF Complications

Case #1: Best of Both Worlds



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Solving CLF Complications

Case #1: Best of Both Worlds

- The **soft skirt size** is best determined by HVID
 - If HVID is **> 11.8mm**, start with an 8.1 (Medium) skirt
 - If HVID is **≤ 11.8mm**, 8.4 (Flat) skirt is indicated
 - If HVID measurements are not available, **begin with an 8.1 skirt***
 - If Hydra-PEG is not ordered, begin with the FLAT skirt 8.4
- **Center Distance Zone** size is driven by **photopic pupil** diameter
 - Measure **photopic** pupil diameter for each eye using a PD ruler.
 - Center Distance Zone size is calculated by **subtracting 1.0mm**
 - Available zone size range: 1.8 – 4.0 mm

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Solving CLF Complications

Case #1: Best of Both Worlds

Parameters	Center Near	Center Distance
Central Zone Size	3.0mm	1.8 – 4.0mm
Add Powers	+1.00, +1.75, +2.50	+0.75 - +5.00D (in 0.25D steps)
Patient Target	<ul style="list-style-type: none"> Higher add presbyopes 	<ul style="list-style-type: none"> Emerging presbyopes Other applications

Spectacle Add	+0.75	+1.00	+1.25	+1.50	+1.75	+2.00	+2.25	+2.50
Design: Dominant Eye	CD	CD	CD	CD	CD	CD	CN	CN
Design: Non-Dominant Eye	CD	CD	CD	CD	CD/CN	CD/CN	CN	CN

CD=Center Distance CN=Center Near

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Solving CLF Complications

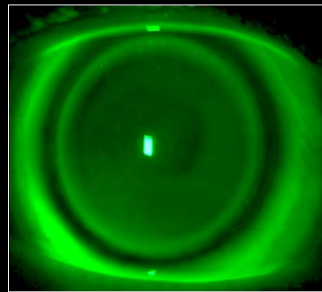
Case #1: Best of Both Worlds

■ 1st f/u

- Good compliance with H₂O₂ Soln, Good comfort & lens handling
- Great IVA/NVA with Hybrid OU, but OD DVA not as sharp as OS DVA
- Mild night halo/glare, OD > OS
- OD: CD/ZN 3.5/7.8/Med/-5.50/Add +1.75 20/30- (OR -0.75 20/20-)
- OS: CN/ZN 3.0/7.8/Med/-5.50/Add +1.75 20/20- (OR -0.50 20/20)
- NVA OU – J1+
- NaFL eval can be optional

■ Final Rx at 1 Mth f/u

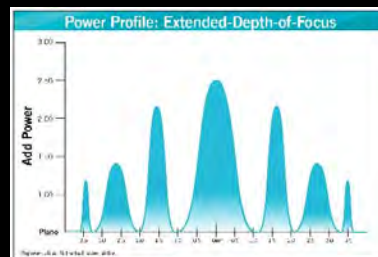
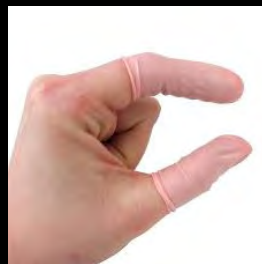
- CN Designs OU improved DVA/NVA
- Over CL Rx:
 - OD: -1.00 Sph
 - OS: -0.50 Sph



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Solving CLF Complications

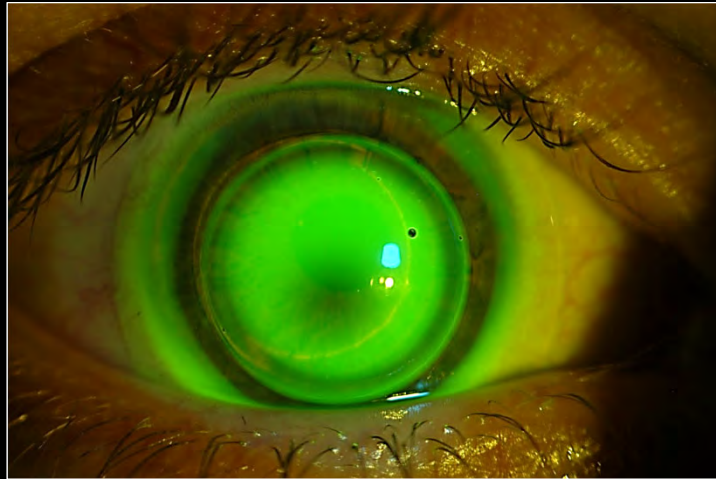
Case #1: Best of Both Worlds



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Solving CLF Complications
Modern Hybrids: Irregular Cornea



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Solving CLF Complications
Modern Hybrids: Irregular Cornea

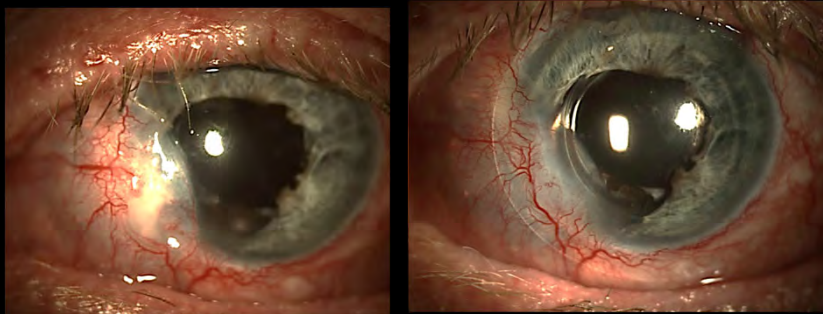


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Solving CLF Complications

Case #2: Modern Hybrids To The Rescue

- Challenges of “major” scleral obstacles
 - Hyperemia ± air bubbles ± decrease comfort
 - Customized technologies for Haptic and OZ



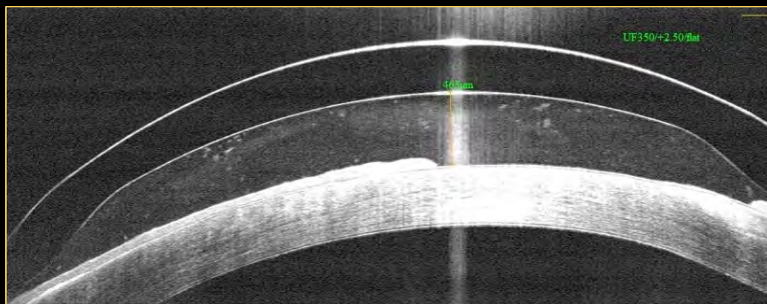
Courtesy of J Sonsino, O.D., FAAO

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Solving CLF Complications

Modern Hybrids: Do's & Don'ts

- ASOCT & Slit Lamp: Evaluate both central and peripheral corneal vault
 - Central ~100 – 150µm



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Solving CLF Complications

Case #3: Glasses Are KCN's Best Friend?

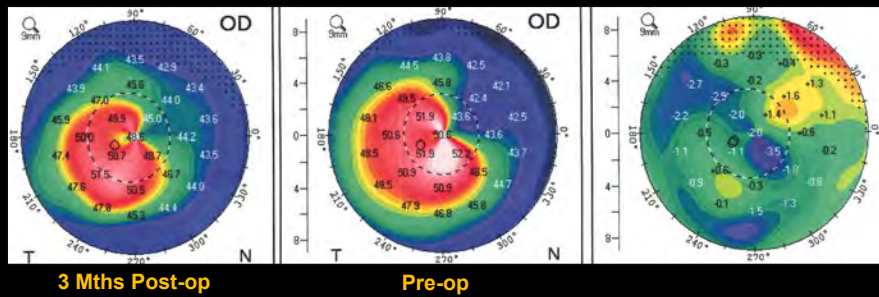
- Pt RB, 68 y/o WM, w/ KC Hx ~40 yrs
- c/o of GP intolerance and d/c CL wear,
- c/o unhappy with UCVA and BSVA
- Pt interested in CXL
- Anterior Segment findings consistent with KC, OU; (-) Scar/Nodule
 - NS 1+ OU, otherwise WNL

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Solving CLF Complications

Case #3: Glasses Are KCN's Best Friend?

- Post-Op 3 Mths
 - UCVA **OD 20/50**** OS 20/40
 - MRVA **OD 20/40** OS 20/25-
 - MR (OD) **+0.50, -3.25 x065****
 - MR (OS) **-1.50, -1.75 x140**



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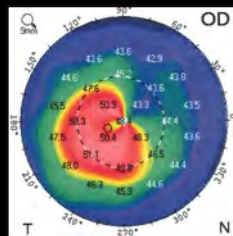
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Strategies for Solving Contact Lens Complications

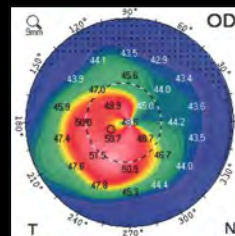
Solving CLF Complications

Case #3: Glasses Are KCN's Best Friend?

- Post-Op 9 Mths
 - Has been refit to Hybrid CLs by referral OD with improved CL tolerance (all day wear)!
 - Still unhappy with CLVA, Blur OD > OS
 - (-) Ghosting/Monocular Diplopia...
 - DVA & NVA are still better in glasses



s/p 9 Mths



s/p 3 Mths

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Solving CLF Complications

Case #3: Glasses Are KCN's Best Friend?

CLOR (OD) +0.75, -1.50 x065 20/30+

CLOR (OS) +0.75, -1.00 x050 20/20-3

A: Residual Cylinder OU

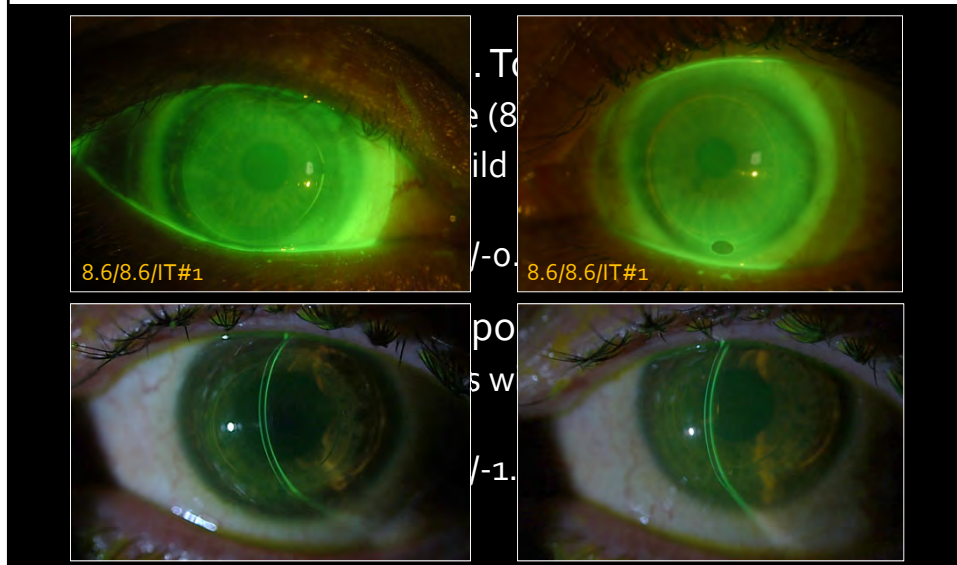
P: Discuss CL Refit OU in Custom Soft KC CLs



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Solving CLF Complications

Case #3: Glasses Are KCN's Best Friend?



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Solving CLF Complications

Case #3: Glasses Are KCN's Best Friend?

Custom Soft KC - Novakone F/U #1

- Good comfort and improved CLVA
 - OD CLVA: 20/30- OR: -0.50 20/30+ (IT Factor?)
 - OS CLVA: 20/25+ OR: -0.50 20/20-
- However, reports spectacle blur
 - OD ~1-2 Hr (SLE: Mild bearing, OD>OS)
 - OS ~20 Min (SLE: Mild bearing, Excess Movt)

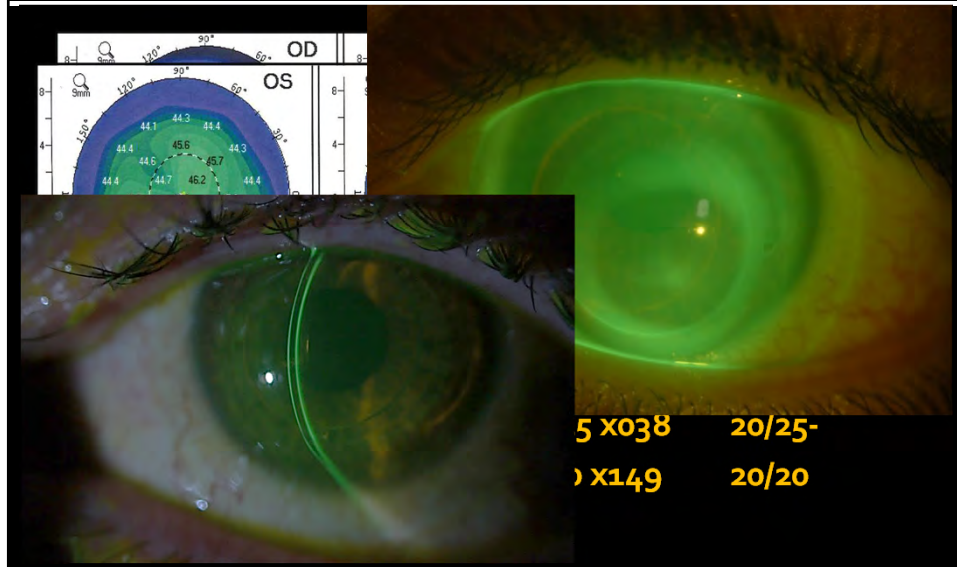
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Case #3: Glasses Are KCN's Best Friend?

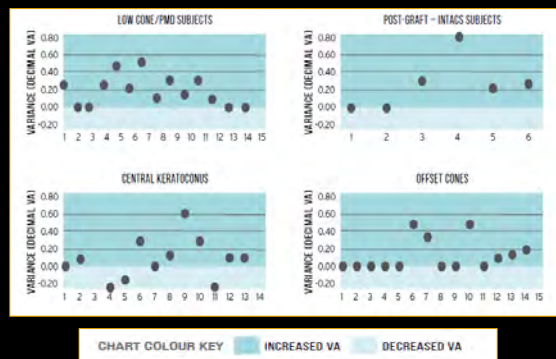


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Solving CLF Complications

All Roads Lead to Rome

In 45 out of 48 eyes (24 subjects), VA was the same or improved with new thinner soft KC design



OPTIMAL FIT

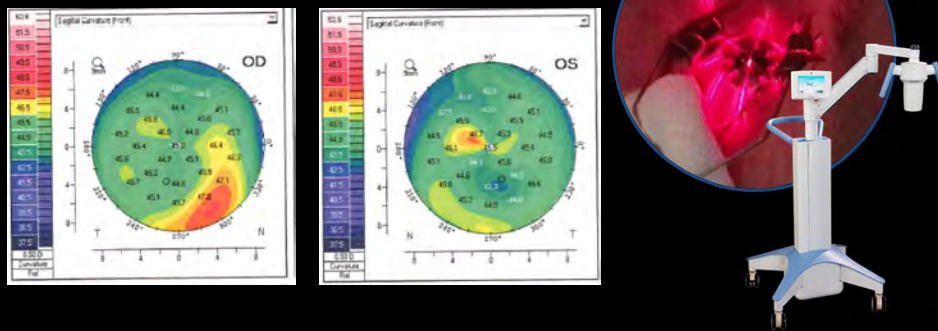
SiHy Material Available

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Solving CLF Complications

Case #4: Two is Better than One?!

- Assessment: KC, OU
- Plan: CXL & refit CL 3 Mths post-CXL



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Solving CLF Complications

Case #4: Two is Better than One?!

- OD SynergEyes A/7.2/8.2/-6.00
 - Cyl OR: -0.50, -0.50 x090 2020+
- OS SynergEyes A/7.3/8.3/-5.00
 - Cyl OR: Plano, -0.50 x100 20/20+
- SLE: Central/Junctional vault & Good Movt, OU
 - Patient noted improvement in VA & Starburst
 - Pt ed about large pupils vs OZ, Rx given for Alphagan-P (if needed)
 - Pupils (Bright/Dim): 5.5 mm/8mm OU

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Solving CLF Complications

Case #4: Two is Better than One?!



- OD - SynergEyes A/7.2/8.2/-6.50/EP
- OS - SynergEyes A/7.3/8.3/-5.00/EP

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Solving CLF Complications

Case #4: Two is Better than One?!

- f/u#1
 - Patient reports good comfort & improved VA, OU
 - CLVA OD 20/20-2 (OR: plano)
 - CLVA OS 20/20-2 (OR: plano)
- Mild improvement in night starburst, only with Alphagan-P 0.1%
- SLE: Good center / ILZ vault & CL Movement, OU
 - Mild Anterior surface protein deposit, OU

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Solving CLF Complications

Case #4: Two is Better than One?!

- Plan: Suspect possibility of night flare symptom due to aberrant pupil sizes. Refit in GP.
 - OD 44.50/-4.25/10.5/OZ 8.5/STD PC (20/20)
 - OS 44.25/-3.25/10.5/OZ 8.5/STD PC (20/20)
- Pt reports good comfort & better VA (vs hybrid or old soft toric CLs)
 - Much less starburst & sees it only from his peripheral vision (from "edge of the GP lenses")
 - Symptom improves slightly with Alphaga-P 0.1%

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Solving CLF Complications

Case #4: Two is Better than One?!



- OD 44.00(7.67mm)/-3.75/11.2mm/OZ 10.0/1-STP PC
- OS 43.75(7.71mm)/-2.75/11.2mm/OZ 10.0/1-STP PC
- * Boston XO material and plasma treatment ordered

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Solving CLF Complications

Case #4: Two is Better than One?!

- f/u #2
 - Pt RTC after a 2nd opinion consultation with another corneal specialist ~1 month ago
 - Was Rx Pilocarpine 1% & d/c GP despite comfortable
 - Blurred DVA & brow ache, but improved night starburst
 - d/c Pilocarpine 1% due to brow ache ~10 days ago
 - Pt reports that he would tolerate VA reduction, if night starburst can be eliminated
- CLVA OD 20/20 (OR Plano)
- CLVA OS 20/20 (OR Plano)

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Solving CLF Complications

Case #4: Two is Better than One?!

- Plan: Discuss utilization of piggyback with a color color prosthetic lens. Patient educated on concerns with oxygen permeability and need for close monitoring,
- Ordered color prosthetic CLs for PB system,
 - OD/OS: Durasoft 3 Colorblend Blue/8.3/Plano/3.0mm open pupil/Light underprint OU

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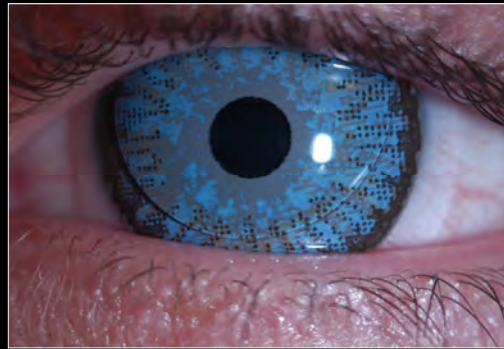
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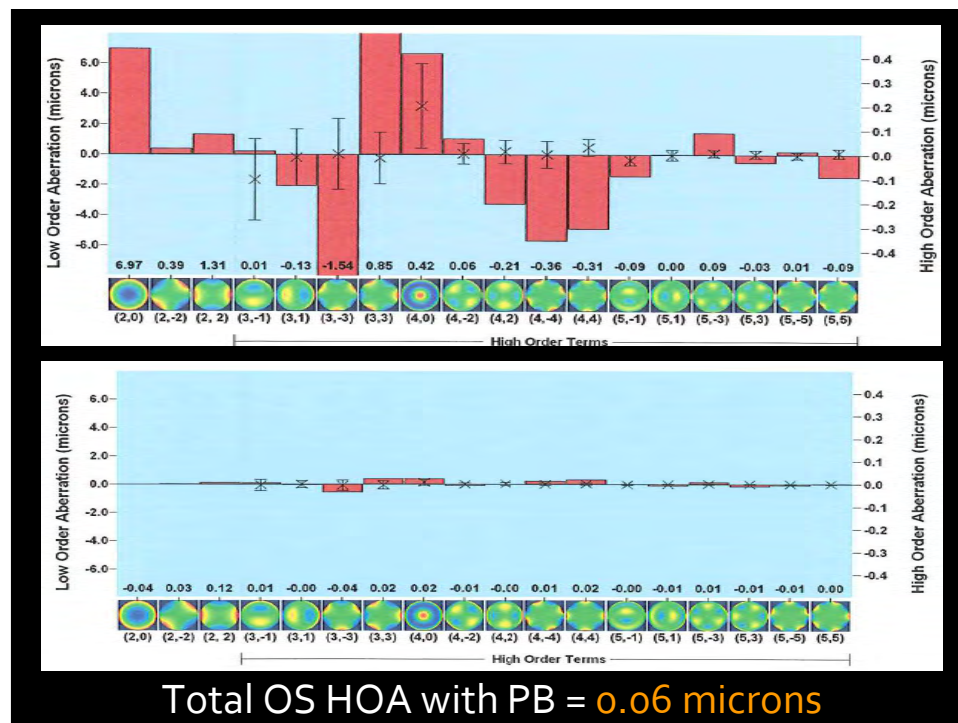
Solving CLF Complications

Case #4: Two is Better than One?!

- f/u #3
 - CLVA OD 20/20 (OR: PL) OS 20/20 (OR: PL)
- SLE: Good movements (SCL & GP)
 - Good GP NaFL
 - Cornea: (-) SPK



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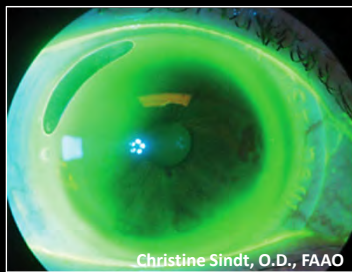
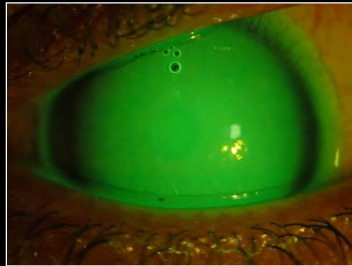


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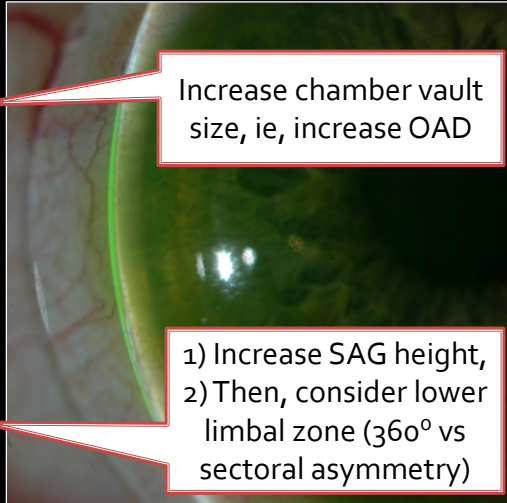
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Solving CLF Complications

General Scleral CLF Eval



Christine Sindt, O.D., FAAO



Increase chamber vault size, ie, increase OAD

1) Increase SAG height,
2) Then, consider lower limbal zone (360° vs sectoral asymmetry)

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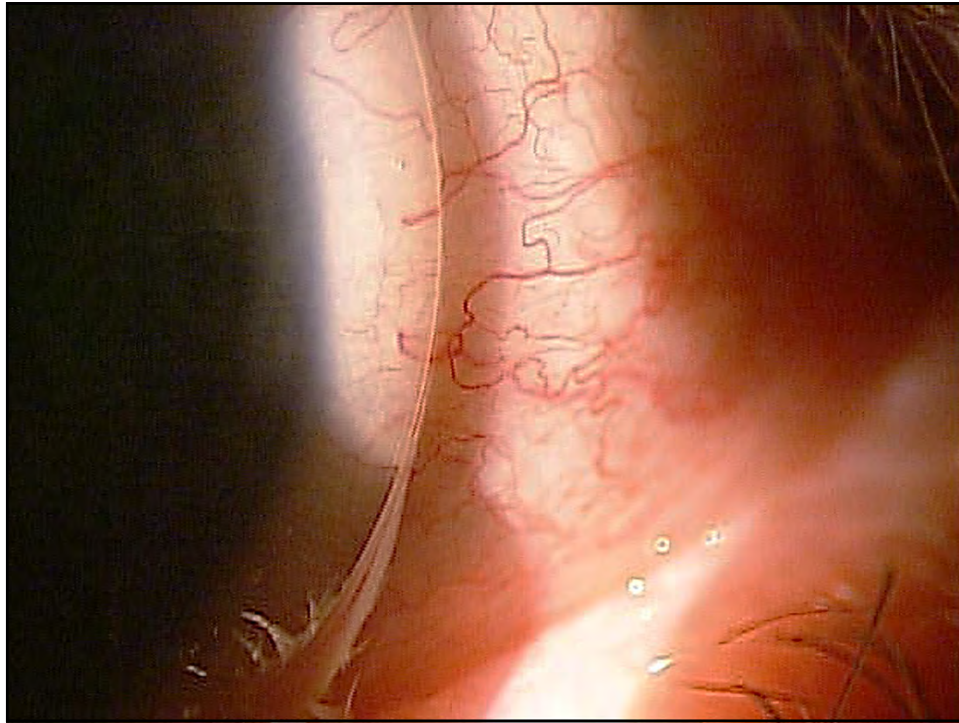


Stephanie Woo, OD

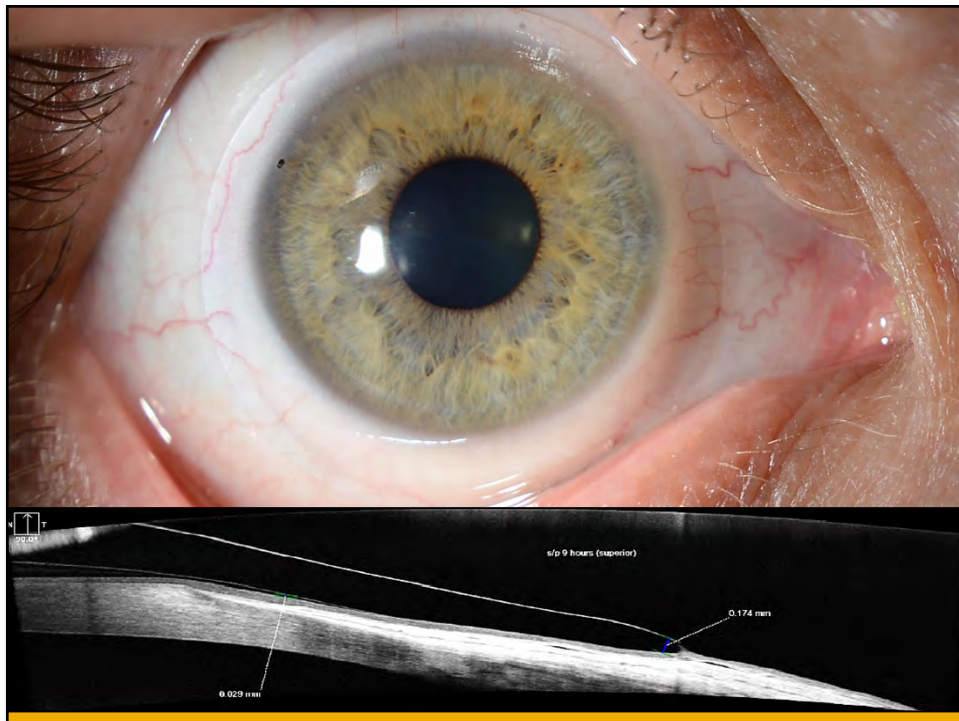
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Solving CLF Complications

Case #5: The Devil is in the Detail

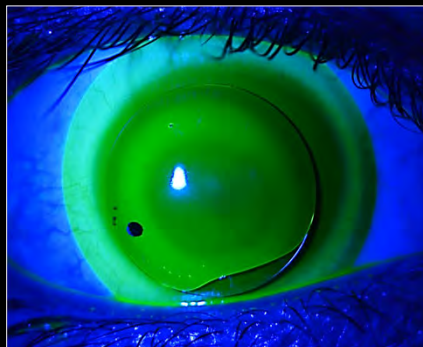
- 30 YO, Indian, Male, Long Hx of KCN
- Referred by OMD, non-candidacy for CXL
 - Thinnest CT OD 339mi OS 294mi
- >10 Yrs of GP wear, but intolerance started ~1Yr
 - Was refit in PB, acceptable comfort
 - Episodic Photophobia & Pain, Upon awake & EOD,
 - Bothersome night Starburst & Halos, OS > OD
 - Dislodgement of GPs, controls head/eye Movt
 - Subsequent Hybrid refit & insert with Biotrue
 - uncomfortable & removal is difficult

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Solving CLF Complications

Case #5: The Devil is in the Detail

- CLVA (PB): OD 20/25-2 OS 20/30-2
- PHVA (PB): OD NI OS 20/25+2
- CL Removal: OD 1+ SPK OS 2+ SPK



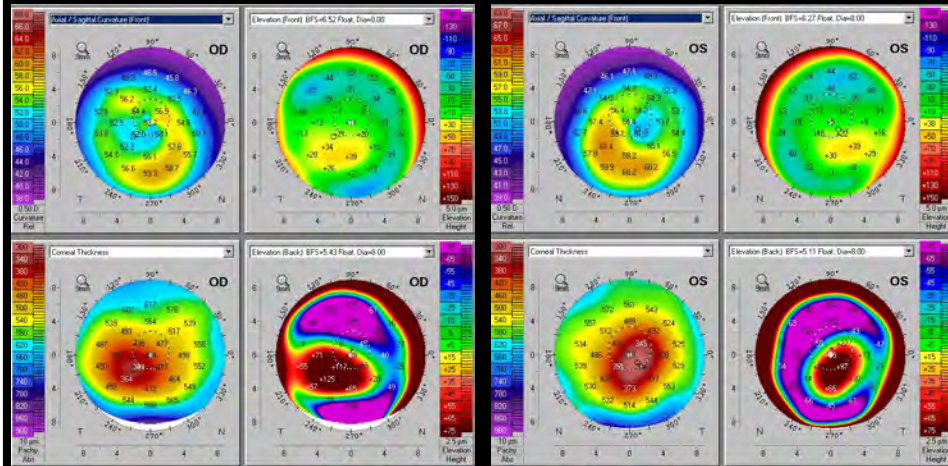
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Solving CLF Complications

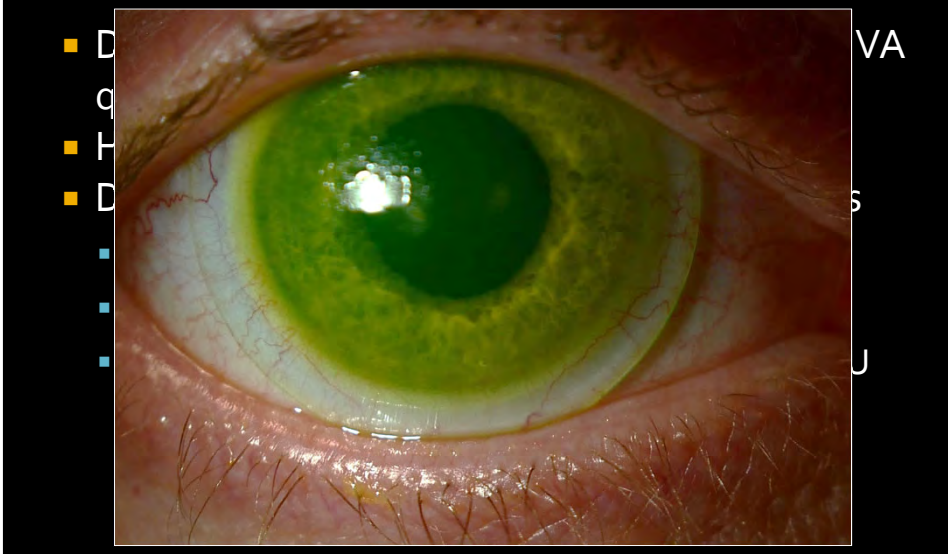
Case #5: The Devil is in the Detail



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Solving CLF Complications

Case #5: The Devil is in the Detail



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Solving CLF Complications

Case #5: The Devil is in the Detail

- Given general scleral shape data trend, current Dx CL diameter, small HVID, and mild PC mismatch, decided to order spherical haptics to start, OU
 - OD: Jupiter 15.6/4D Reverse Geometry/45.25/-1.25/OZ 8.6/6.85-1.7/8.70-0.9/13.25-0.5/14.75-0.4/Opt Xtra/HP/Clear
 - OS: Jupiter 15.6/4D Reverse Geometry/46.00/-1.50/OZ 8.6/6.75-1.7/8.70-0.9/13.25-0.5/14.75-0.4/Opt Xtra/HP/Blue

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Solving CLF Complications

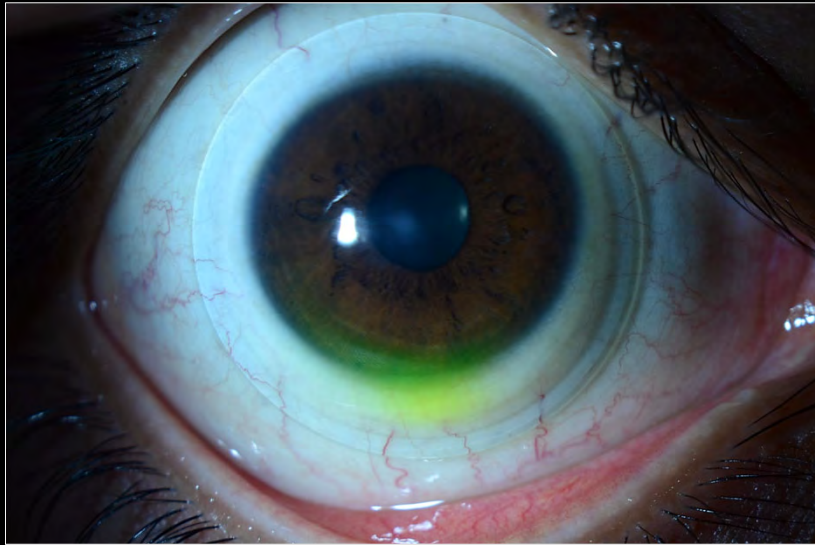
Case #5: The Devil is in the Detail

- F/U #1
 - Good comfort, all day wear, resolution of Photophobia/Pain upon awake or at EOD,
 - Greatly reduced Starburst/Halos, No Dislodgement
 - Good VA OU (OD > PB vs OS < PB)
 - OD CLVA 20/20-3 (OR: +0.25, 20/20-2)
 - OS CLVA 20/30 (OR: +0.50, -1.00 X055, 20/25)
 - Central Clearance, OU (5Hrs wear): ~100-120mi,
 - Good Limbal Clearance, OU

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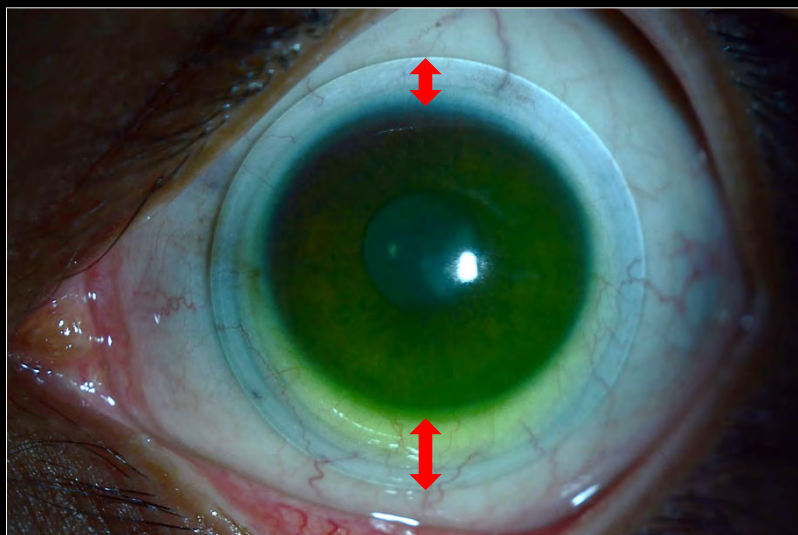
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Solving CLF Complications
Case #5: The Devil is in the Detail



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Solving CLF Complications
Case #5: The Devil is in the Detail



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Solving CLF Complications

Case #5: The Devil is in the Detail

- Plan:
 - OD - Keep as is,
 - OS - 2D Toric PC to see if improve position & VA
 - OS: Jupiter 15.6/4D Reverse/2D Toric/46.00/-1.50/OZ 8.6/6.75-1.7/8.70-0.9/**12.50**-13.50-0.5/**13.75**-15.00-0.4/Opt Xtra/HP/Blue
 - Pt educate on potential removal differences in OS and demonstrated "lid message" technique, PRN

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Solving CLF Complications

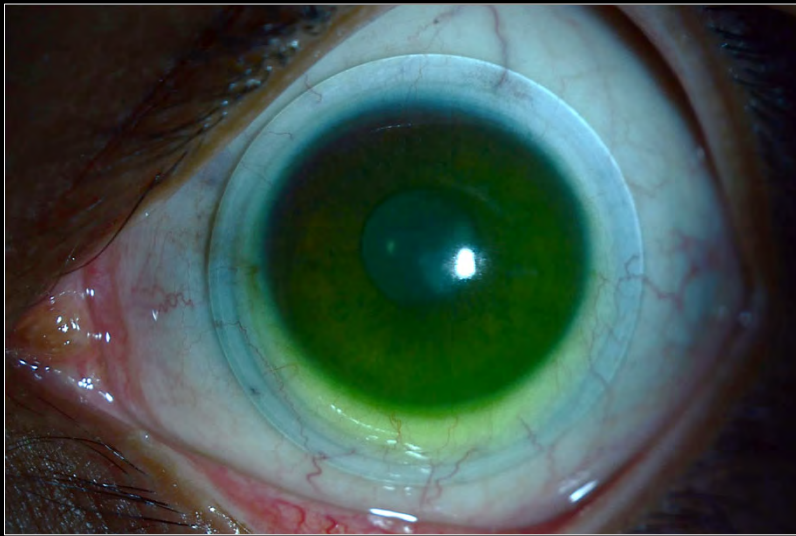
Case #5: The Devil is in the Detail

- f/u #2
 - Good comfort and all-day wear (15 hrs/day)
 - Night Starburst & Halos continues to improve
 - Good VA OU (OD > PB, OS = PB)
 - OD CLVA **20/20**
 - OS CLVA **20/25+** (OR: +0.25, -0.25 x165)
 - Central Clearance, OU (2Hrs wear): ~150mi,
 - Good Limbal Clearance, OU

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Solving CLF Complications
Case #5: The Devil is in the Detail



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Solving CLF Complications
Case #5: The Devil is in the Detail

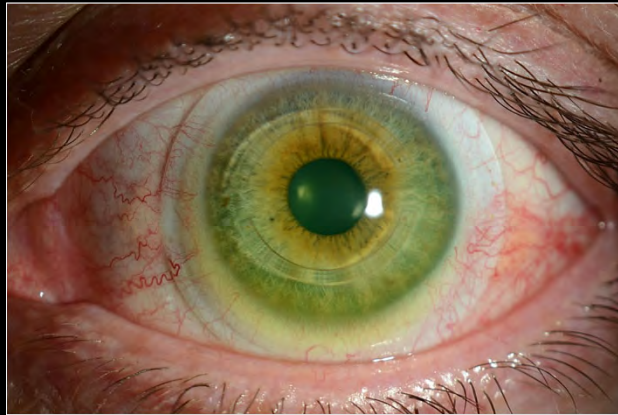


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Solving CLF Complications

Posterior Toric Haptics: Designs and Benefits

- PC Alignment & lens centration
- Mild Scleral Obstacles
- Regulate suction/lens removal
- Fogging in tear lens



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Twitter: @ClarkChangOD

LinkedIn: www.linkedin.com/in/clark-chang-981b1322

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Strategies for Solving Contact Lens Complications

Specialty Lens Consultants Team

Arch Holcomb M.Sc. Scleral Lens Expert Experience: Over 35 years in the Contact Lens Industry Taught at Ohio State University, College of Optometry Ext. 5375 • aholcomb@abboptical.com	Ann Shackelford Experience: Over 40 years in the Contact Lens Industry NCLC Certified 1997 NCLC AC Certified 2007 Ext. 5823 • ashackelford@abboptical.com	Dede Reyes Hybrid Lens Expert New Consultant Experience: 20 years Clinical Contact Lens 12 years Contact Lens Industry NCLC-AC certified 1990 Fellowship CLSA 1995 Ext. 5860 • dreyes@abboptical.com
Alika Mackley Scleral Lens Expert Experience: Over 35 years in the Contact Lens Industry NCLC certified 2003 NCLC-AC certified 2007 Ext. 4767 • amackley@abboptical.com	Grant Parson Experience: Over 35 years in the Contact Lens Industry NCLC Certified 2013 Ext. 5325 • gparson@abboptical.com	Crystal Bailey Experience: Over 20 years in the Contact Lens Industry NCLC Certified 2002 Ext. 5817 • cbailey@abboptical.com
Pam Geimer Scleral Lens Expert Experience: Over 25 years in the Contact Lens Industry NCLC Certified 1995 NCLC AC Certified 2013 Ext. 5870 • pgeimer@abboptical.com	Sherre McMahon Experience: Over 35 years in the Optical Industry ODT certified 1999 NCLC certified 2004 Ext. 4768 • smcmahon@abboptical.com	Stephanie Carnegie Experience: Over 15 years in the Contact Lens Industry NCLC Certified 2001 NCLC AC Certified 2013 Ext. 5837 • scarnegie@abboptical.com
Joe Hanson Scleral Lens Expert Experience: Over 35 years in the Contact Lens Industry Ext. 4562 • jhanson@abboptical.com	Larry Platt Experience: Over 35 years in the Contact Lens Industry NCLC certified 1989 NCLC-AC certified 1999 Ext. 4103 • lplatt@abboptical.com	Mike Wong Experience: Over 35 years in the Contact Lens Industry NCLC Certified 2011 Ext. 5814 • mwong@abboptical.com

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Products

The Most Extensive Portfolio of Specialty Contact Lenses in the Industry,
including the following manufactured and distributed lenses:

Manufactured Lenses			
IOD FLEXFIT	IOD EXPERIENCE IN EYE CARE	EUROPA SCLERAL	Jupiter Scleral
DYNA Scleral	DYNA Semi-Scleral	INFINITY SCLERAL	ROSE K2 XL
Seamless	TANGENT STREAK	SPECTRAVUE	PURESITE
UCMA		DYNA Cone	DEFINITIVE
KERRA SOFTIC	CONCISE Custom	CONCISE Colors	
Distributed Lenses			
Atlantis	AMPEYE	Zenlens	eQRA
LIFESTYLE	Renovation	ESSENTIAL	SynergEyes
PARAGON OPT	Euclid		

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Practice Development Educational Series

Strategies for Solving Contact Lens Complications

ABB Delivers Greater Value

- ✓ **Consultation efficiency** Call one consultant for access to specialty soft, Hybrids, and an extensive portfolio of multifocals, torics, sclerals, and irregular corneal lenses.
- ✓ **Order Consolidation** Ordering all lenses from one company via website or phone ordering.
- ✓ **Shipping efficiencies** One bundled shipment means time and money saved!
- ✓ **Accounting efficiencies** One statement and one payment means easy reconciliation
- ✓ **Business Review** Measure your specialty portfolio growth in one simplified report
- ✓ **Education** Lunch and Learns, staff trainings, live webinars, wet labs, and scleral boot camps



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Tangible Hydra-PEG
HYDRA-PEG

A "Game Changer" for Eye Care Practitioners' Practices
Tangible Hydra-PEG™ is the first contact lens coating technology in the world for specialty custom lenses.

Goodbye lens discomfort. Hello happy patients.
You'll say goodbye to endless refits and lens returns due to discomfort, and your patients will say hello to a more wearable lens.

- 90% water coating with high wettability
- Excellent lubricity for the WOVN factor
- Resistant to deposits
- Long tear breakup time

Improve Your Patients' Satisfaction... And Your Own Practice

- PATIENT PREFERENCE** – The vast majority of patients prefer lenses coated with Tangible Hydra-PEG to uncoated or habitual lenses, and report greater end of day comfort.¹
- GREATER CONVENIENCE** – Tangible Hydra-PEG can make the custom contact lens experience less of a hassle for patients, by freeing them from rewetting drops and reducing deposits that require mid-day cleanings.
- IMPROVED WETTABILITY** – With greater wettability, lenses coated with Tangible Hydra-PEG can reduce lens returns.

¹Waller, R. Surface & Scleral lens surface coating improves vision and comfort. Poster presented at the 8th International Conference of the Tear Film and Ocular Surface Society (TFOS), September 2019, Montpellier, France.

Ordering is Easy

- Tangible Hydra-PEG is available on Contamac™ Optimum GP lenses.
- Ask our specialty customer service representative to add Tangible Hydra-PEG coating when ordering your prescriptions

Now Available

Now Available



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Any Questions?

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Practice Development Educational Series

Topic	Date	Time	Speaker
Scleral Lens Design and Fitting: The Basics	Available for viewing online		Maria Walker OD, FSLs, FAAO
Getting the Most out of Presbyopic Contact Lens Options	Available for viewing online		Thomas Quinn OD, MS, FAAO
Strategies for Solving Contact Lens Complications	Thursday, September 17, 2019	9-10PM ET	Clark Chang OD, FAAO
Practice Management Tips for Billing and Coding and other Issues to build your Specialty Contact Lens Practice	Thursday, December 12, 2019	9-10PM ET	Stephanie Woo OD, FAAO, FSLs



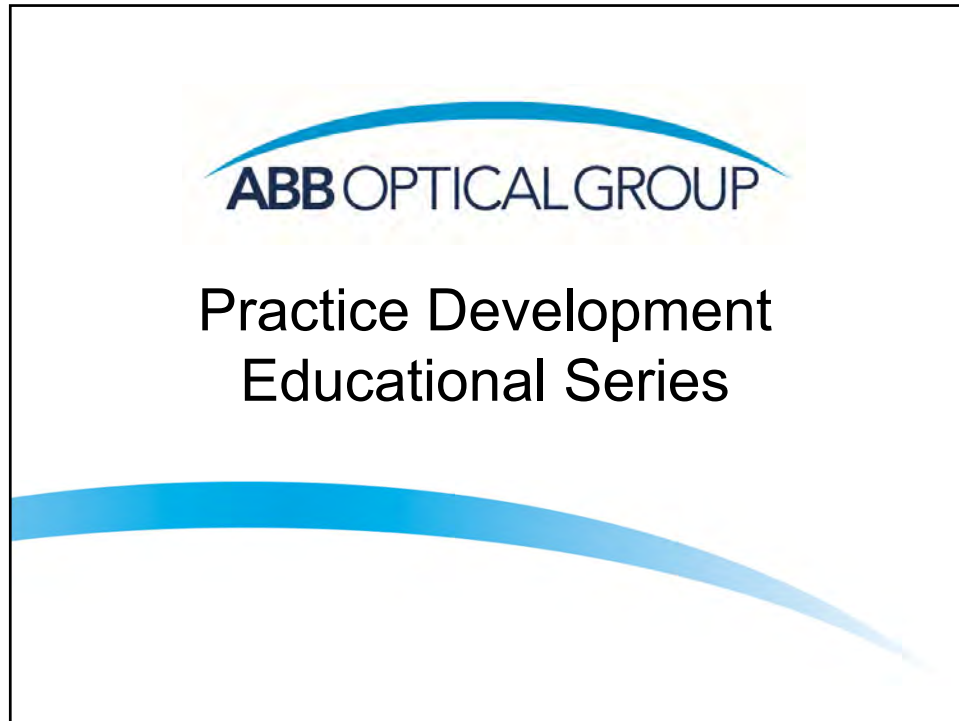
Webinar 4

Practice Management Tips for Billing & Coding and other Issues to build your Specialty Contact Lens Practice

December 12th

Stephanie Woo
OD, FSLs, FAAO

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