

# Rejuvenate Your Contact Lens Practice by Revisiting the Hybrid Modality

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## Disclosures



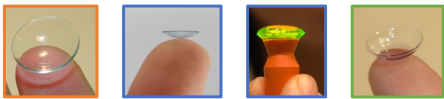
In the last year, S. Ramdass has received honoraria from:

- SynergEyes Inc
- Bausch + Lomb SVP
- Pentavision LLC



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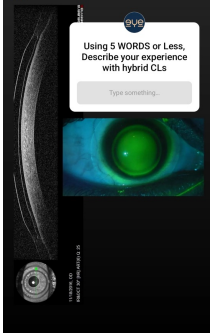
## Tools in Your CL Toolbox



Soft Lenses      Gas Permeable Lenses      Hybrid Lenses

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## Contact Lens Fitters Call to Action



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### What CL fitters had to say...

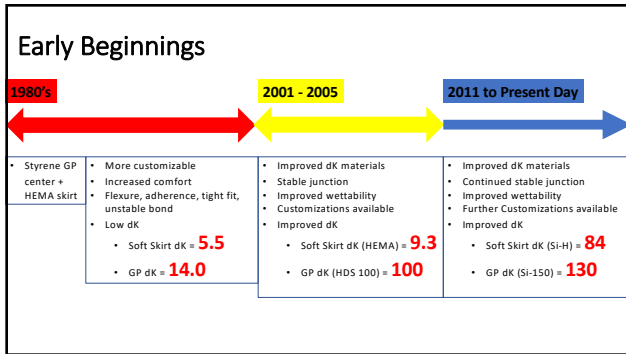
inconsistent	inconsistent	center to side of eye	They touch their eyes.	Lens won't off
avoid, break apart in eye	avoid, break apart in eye	hard to insert	Excessive	center to side of eye
"Vision like my glasses"	hard difficult to fit	Not as hot as GP	inconsistent	center to side of eye
Conductivity isn't as consistent	Center well fit eye	High modulus weight "fluff" needed	center to side of eye	center

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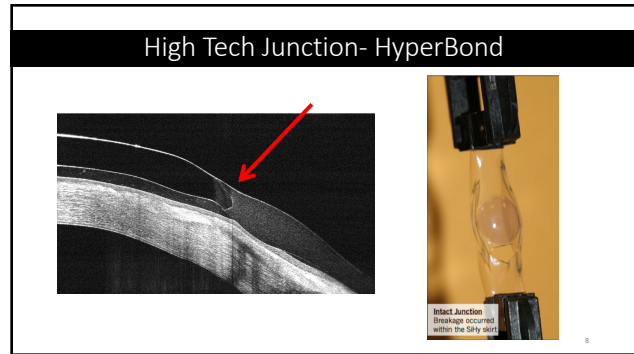
## 1. Design Stability

inconsistent	Sometimes good, sometimes not	avoid, break apart in eye
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### Who can benefit from a hybrid lens fit?

- Normal Corneas
  - Astigmatism
    - Cyl greater than sphere
    - Oblique astigmats
    - Hyperopic astigmats
  - Presbyopia
  - High Rx's
  - Any SV astigmat who is unhappy!
- Irregular Corneas
  - Ectasia
  - Post surgical
  - Other corneal diseases

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### 2. Is there tear flow under a hybrid lens?

Using 5 WORDS or Less, Describe your experience with hybrid CLs

**Lens seal-off**

Using 5 WORDS or Less, Describe your experience with hybrid CLs

**Suction**

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### Yes!

- Tear exchange study (2015)
- Texas Eye Research and Technology Center
- 17 previously diagnosed keratoconus patients
- Fit in hybrid lenses for the irregular eye according to manufacturer recommendations
- Fluoron Master F52 Fluorophotometer - quantify the decay of post-lens high molecular weight fluorescein (HSA) over time
- Tear exchange rate found to be ~ 2-3%/min

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Using 5 WORDS or Less, describe your experience with hybrid CLs

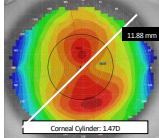
**neovascularization**

### 3. Ocular Health with Hybrid Lens Wear

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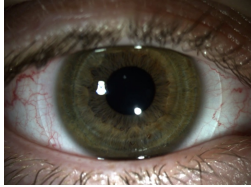
### Case: Normal Cornea, Near Limbus-to-Limbus Astigmatism

- Occupation: Student
- PMH/POH: unremarkable, established soft toric contact lens wearer
- SRx:
  - OD -5.50 -1.25 X 180
  - OS -5.00 -2.00 X 177
- Topography:
  - OD 42.49D@013/44.00D@103



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### Let's Assess the Fit



7.9 BC, Medium (8.1 mm) skirt

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### 1-week Follow-Up



7.9 BC, Medium (8.1 mm) skirt

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### 4. Time Investment Needed

Using 5 WORDS or Less, Describe your experience with hybrid CLs

Not difficult to fit


Using 5 WORDS or Less, Describe your experience with hybrid CLs

Too much chair time

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### Adhering to ISO standards (2019/2020)

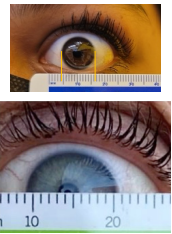
- Jan 2020 – Roundtable discussion at GSLC
- Each hybrid diagnostic contact lens is delivered to the practice sterilized in a glass vial containing a sterile buffered isotonic saline solution
- Disinfect, Neutralize and store for up to 28 days
- REPEAT



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### Hands off...Empirical Fitting

- Spectacle Rx
- K's
  - Topographer recommended but not required
- HVID
- Pupil Size
- Ocular Dominance
- Topography driven manufacturing software



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Using 5 WORDS or Less, Describe your experience with hybrid CLs

Insertion bubbles

5. Are all bubbles bad?

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When should I make a change in the fit?

1. Small bubbles trapped under the GP center.
2. Clinically insignificant bubble at the GP edge.
3. Clinically significant bubble at the GP edge.
4. Skirt curve is too steep.
5. Skirt curve is too flat.

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Using 5 WORDS or Less, Describe your experience with hybrid CLs

High molecular-weight NaFI needed

6. When and what type of NaFI needed?

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Case

- 26 YO, WM
- Keratoconus OU
- Diagnosed at ~21 YO
- Previous history of corneal GP wear OU
- Frequently loses lenses due to their instability on eye
- A more stable and comfortable contact lens option is requested

What diagnostic lens would be ideal for this patient's Right Eye?

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Baseline Topography

Mco	Distance: 0.95 mm Angle: 281° Power: 50.00 D				
Flat K	43.88 D @ 17°	Steep K	47.60 D @ 107°	ΔK	3.72 D
Flat e <sup>r</sup>	0.87 @ 17°	Steep e <sup>r</sup>	0.48 @ 107°	IS Index	1.38 D

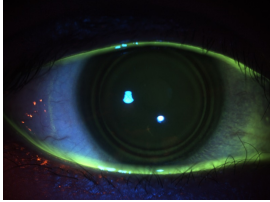
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Hybrid Lenses Vault the Irregular Corneal Surface

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### Use of NaFL During the Follow-Up Visits

- Remove the lens and stain the cornea
- Impression rings might be observed
- Watch for erosions
- Watch for true epithelial staining
  - Stagnant tears/protein can lead to pseudostaining



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### 7. Hybrid Surface Wetting Characteristics

Using 5 WOVES or Lens, Describe your experience with Hybrid CLs

hard to remove

Using 5 WOVES or Lens, Describe your experience with Hybrid CLs

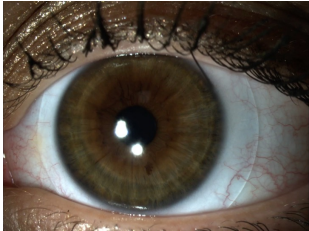
Hard to manage deposits

Using 5 WOVES or Lens, Describe your experience with Hybrid CLs

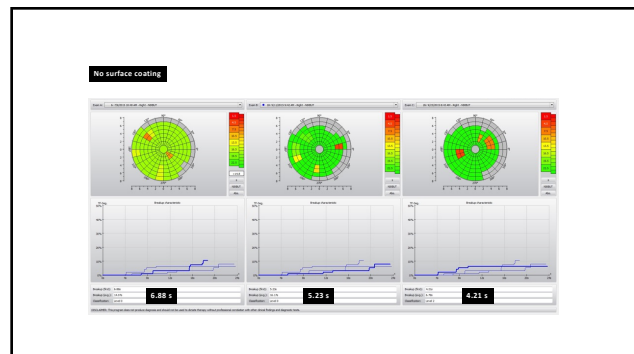
Better for active wearers

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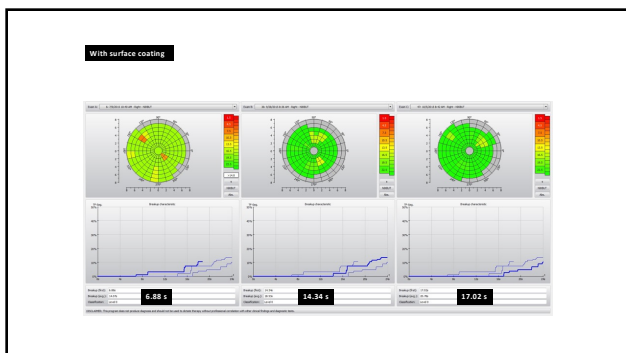
### "My lenses feel dry"



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### 8. Care and Handling of Hybrid Lenses

Using 5 WOVES or Lens, Describe your experience with Hybrid CLs

Expensive

Using 5 WOVES or Lens, Describe your experience with Hybrid CLs

hard to remove

Using 5 WOVES or Lens, Describe your experience with Hybrid CLs

Better for active wearers

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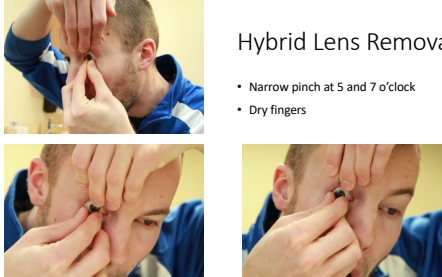
### Hybrid Lens Insertion

- Drop of Preservative-Free Lubricant In Bowl
- Lids held wide, place lens on eye

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### Hybrid Lens Removal

- Narrow pinch at 5 and 7 o'clock
- Dry fingers

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### Hybrid Lens Removal Tips

- Narrow pinch at 5 and 7 o'clock
- Dry fingers
- If the lens skirt is dry, place a few drops of saline in the eye before removal
- Finger cots
- Low-lint tissue

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### Recommended Solutions

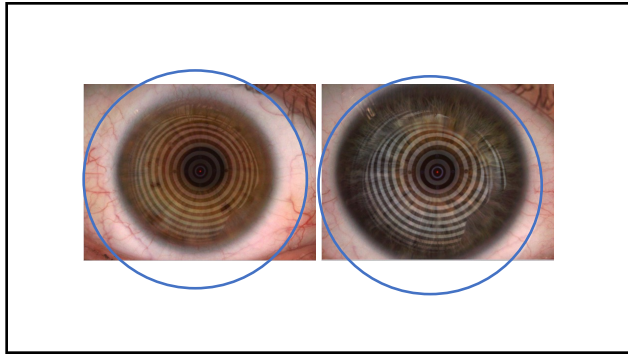
- Multi-purpose Solutions
  - Certain MPS solutions are preferred over others
- Peroxide systems
- Insertion
  - PF saline or PFAT
- Rewetting drops approved for both SIHy and GP

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### 9. "Vision Like My Glasses"



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### Hybrid Lens Fit on a Regular Cornea

**Centration is Key!**

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### A Case of Two Sisters

	Case 1 (16 years old)	Case 2 (19 years old)
<b>Spectacle Refraction</b>	OD: -5.00-1.00x170 OS: -5.00-1.00x165	OD: -4.50-1.50x175 OS: -4.50-1.50x005
<b>Flat/steep K (D)</b>	OD: 44.31/46.00@090 OS: 44.13/46.10@067	OD: 44.98/46.60@100 OS: 45.27/46.46@080
<b>Diagonal Visible Iris Diameter (mm)</b>	OD: 12.37 OS: 12.43	OD: 11.97 OS: 11.94
<b>Horizontal Visible Iris Diameter ("mm)</b>	OD: 12.4 OS: 12.5	OD: 12 OS: 12.1

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### First Dispense

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### One-Week Follow Up

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### Case

- 58 yo male
- H/O LASIK ~7 years ago
- Notices a blur at night when driving
- Has +3.00 readers
- desires improved visual quality
- occupation: self-employed
  - 6@screen time/work day
  - Loves to read
- Measurements needed:
  - baseline refraction + ADD power
  - baseline topographies (vs HVID ruler?)
  - anterior segment evaluation
  - ocular dominance
  - pupil size
- EMPIRICAL ORDER!

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### Lens Designs Tried

- Simultaneous design soft multifocal lens
- Reverse geometry front surface center near design
- Translating GP design
- Aspheric lid attached GP MF
- EDOF Hybrid lens ...WINNER!!

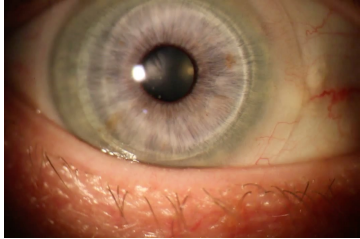
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### Dispense Visit



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### Follow-Up Visit



- OD: 20/20
- OS: 20/20
- OU: 20/20+
- NVA OU: 20/20

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### 10. How comfortable are Hybrid Lenses?



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### Patient Education

<b>Established soft lens wearers vs neophytes</b> <ul style="list-style-type: none"> <li>• You only know what you know</li> </ul>	<b>Insertion &amp; Removal</b> <ul style="list-style-type: none"> <li>• Get it on as centered as possible</li> <li>• Dry fingers a must!</li> </ul>	<b>Adaptation period</b> <ul style="list-style-type: none"> <li>• Comfort increases with continued wear</li> </ul>
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### Additional Factors that Lead to Success



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How likely are you to fit hybrid contact lenses in the next few weeks...?



Thank You!

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