


Maximizing Success with soft Multifocal Contact Lens Fitting

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My Story




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Common Complaints

- My eyes keep changing and when will it stop?
- I should have never started wearing readers – my vision loss is your fault.
- I don't want progressives - my friends say they don't
- I'm so mad - why do I have to buy a new pair of progressives every year.
- Why do multifocal lens take so long to fit and why do I have to pay a fitting fee?
- Why do I not have crisp vision at any range?
- When will all this change stop?
- Am I going to go blind?



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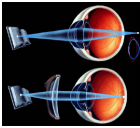
COMMUNICATION

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Explaining Presbyopia - A Novel Approach

OLD Words

- ❖ You are getting old
- ❖ Theories to explain Presbyopia
 - Lens hardening
 - Ciliary muscle weakness



THE SYSTEM OF 10

- ❖ 2.50 D of change over the course of 30 years
- ❖ 0.25 steps = 10 steps of change
- ❖ A reservoir of energy that we lose over time
- ❖ Accommodative system under stress
- ❖ Start at an early age to discuss b/c of Digital Devices

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The New Age of Presbyope

- They are young
- Active – work, hobbies, learning and social
- Want to have fun
- Want to take care of their health
- Have the income to do so
- Play sports (helmets/goggles)
- Influencers – they have friends and kids



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We Refract to 20 Feet and patients

Sit in front of devices all day!!

Let's stop talking about AGE!!


And let's blame something else

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Example – Patient with +1.00 Add

Presbyopic Patient - +1.00 Add

- 4 units of energy Lost – 6 natural units remaining
- Running on 60% only
- I need to give them 4 units of magnification
- Better to be at 100% than only running on 60%




Why it's helpful

- Patients can track and follow their own process
- Better understanding & compliance
- 6 more steps of change to go
- Early start and entry into MFs and Progressives

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Facilitate Understanding



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Simultaneous Vision

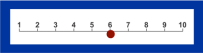
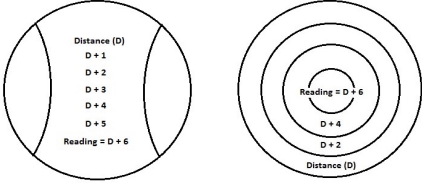
- Available in Soft and GP lenses
- Aspheric, concentric and hybrid designs
- Multiple prescriptions are presented to the visual system
- Multiple images at different ranges are seen by the visual system
- The visual system chooses which image range to focus on



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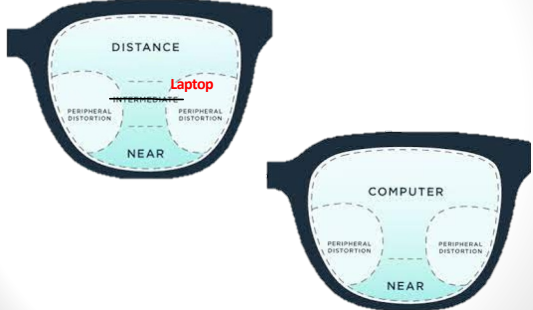
Example – Patient with +1.50 Add

- 6 units of energy Lost – 4 natural units remaining
- Distance = D, Reading = D + 4units of Mag

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PALS vs Computer PALS



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Increased understanding Increases compliance & Decreases frustration & Increases purchasing

How do we reach this goal:

- Your Exam is your Discovery
- Mutually Agree on Plan

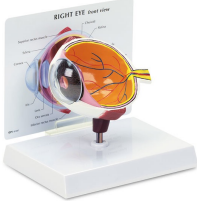
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The Discovery & Recommendations



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Explaining a Contact Lens Fit



- The Benefits of MF lenses
- The process & timeline
- The strengths & limitations
- The visual adaptation
- Small changes can make a big difference
- The impact of light
- Glasses still may be needed
- The back up plan
- Set realistic expectations
- The cost of the fitting

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Explaining Spectacle Options



- Progressives, Anti-Fatigue, computer progressives
- Coatings all included
 - Don't upsell
- Trial Frame
- Simulate a work environment
- Test distance, computer and near rx
- Allow for questions

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Communication Solves Most Problems



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Contact Lens Drop Out



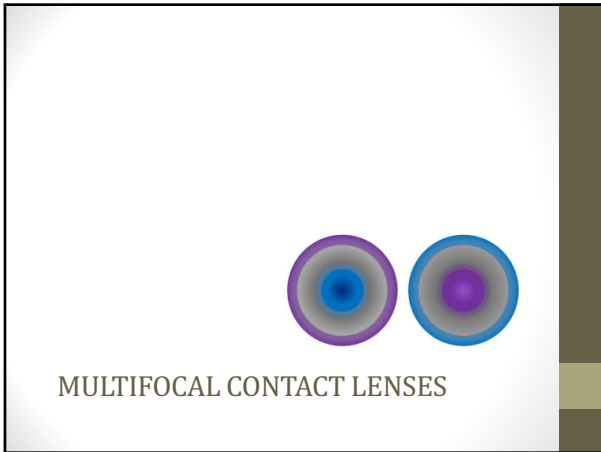
- Two Parts of the relationship
 - Cornea - Check it
 - Contact Lens
- Both Important / Drops Daily

43% Discomfort

26% Dryness

24% Vision Problems

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Benefits of Multifocal Contact Lenses

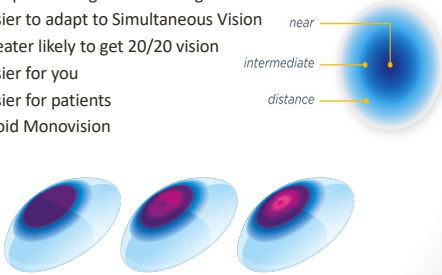
- ❖ Patient Benefits
 - Cosmetics benefits
 - Freedom from glasses – hands free
 - Provide a youthful feeling
 - Satisfying a need and want
- ❖ Functionality
 - All ranges of vision
 - Peripheral vision
 - Ability to multi-task
- ❖ Practice benefits
 - Improve retention & referrals
 - Differentiate your services



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Starting Early

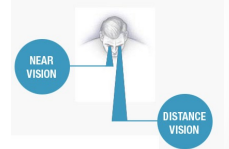
- Less power ranges in the design
- Easier to adapt to Simultaneous Vision
- Greater likely to get 20/20 vision
- Easier for you
- Easier for patients
- Avoid Monovision



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Problems with Monovision

- Many patients are not successful
- Halos and glare
- Night driving safety concerns
- Limited intermediate range
- Decreased contrast sensitivity
- Limited depth perception
- No binocular vision
- Hard to switch to multifocal lenses



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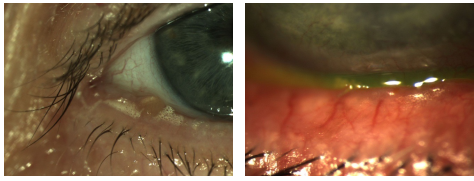


MULTIFOCAL FITTING STEPS

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Before you get started

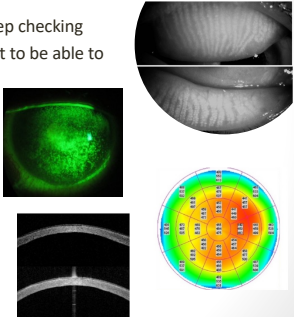
- Clean up the lids before starting – MGD, Bleph, Allergies



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Before you get started

- NaFL on the cornea & keep checking
- Ant Seg Photos document to be able to compare
- Post Seg – Ret, OCT
- Topography
- Pachymetry
- Meibography



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9 Step Multifocal Fitting Process

1. Get an Accurate Refraction
 - Least Minus Power
 - Least Add Power
2. Determine Eye dominance
 - Sight Dominance – Hard wiring
 - Sensory Dominance – Sensitivity to blur
3. Choose Modality
 - 1 day, 2 week, 1 month
 - Soft, Toric, GP, Scleral, Hybrid



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9 Step Multifocal Fitting Process

4. Choose initial lens based on Fitting Guide

SPH/ADD	SOFT EYES
SO N +1.00	1
-1.00 to +2.00	2
+2.00 to +3.00	3

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Why Fitting Guides are Needed

A Patient Spectacle Rx
 OD -1.50 +1.75 Add
 OS -2.00 -0.50 x 180 OD Dominant

DAILIES Total 1 Multifocal
 OD -1.25 MED
 OS -2.00 MED

MvDay daily disposable multifocal
 OD -1.50 LOW
 OS -2.25 MED

Bausch & Lomb Ultra for Presbyopia
 OD -1.50 High
 OS -2.25 High

1-Day ACUVUE Moist Multifocal
 OD -1.50 MID
 OS -2.25 MID

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9 Step Multifocal Fitting Process

4. Choose initial lens based on Fitting Guide

5. Apply, let lenses settle & patient adapt

6. Check the Fit

7. Check distance and near binocular VA's - Bright lights & Real tasks



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9 Step Multifocal Fitting Process

8. Trouble Shooting

- Previous steps done correctly?
- Binocular Distance Over Refraction +/- 0.25 (Push +)
- Fitting Guides
- Monocular VA's
- Consultation
- Phone a friend

Dispensing Tips

9. At the follow up


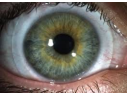
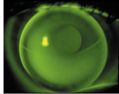
- Repeat the troubleshooting steps
- Stop if happy



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Soft Toric Multifocals

- Test with Trial Lens
- We have more options than before
- Current Lenses
 - Proclear & Biofinity Toric MF
 - B&L Ultra Toric MF
 - Custom Options
- Issues will be comfort or fit, not optics
- If they don't work:
 - Gas permeable lenses
 - Hybrid lenses
 - Scleral Lenses

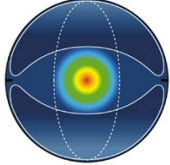




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Fitting Soft Toric MFs

In the past

- Fit with toric lens first
- Troubleshoot
- Assessed stability
- 2nd round of Fitting with a toric MF
- No Fitting guides – Trial and error



Current

- Jump right in
- Use a fitting guide to modify
- They work so well
- Patient who need them - have been waiting – low expectations

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Modified Monovision

- Going Rogue
- No rules
- Combos
 - Two MFs
 - One SV lens One MF
 - One SV lens one Toric MF
 - One Toric Lens One MF
 - One Toric Lens One Toric MF
 - Each one of these where one lens is biased toward near or mid range and one toward distance
- Monocular VAs are looked at
- More educated Trial and Error

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Soft Multifocal Fitting Tips


- Fitting guides to choose lenses & to troubleshoot
- Set realistic expectations
- Adaptation is mandatory
- Lights on
- Use real world tasks to test
- Binocular Distance Over Refraction
- Loose Lenses – No Phoropters
- Monocular VA
- Modified Mono
- Make one change at a time
- If vision is good let them go




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Remember these lines

- The goal is to meet most of your needs most of the time
- You may need to give up a little bit of crispness for freedom
- This is the best that we can achieve
- Don't forget to ask the patient if they are happy!



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SOFT MULTIFOCAL DESIGNS

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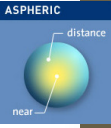
Soft MF Designs

- Aspheric
- Concentric Rings
 - Spherical
 - Aspheric
- Transitions between rings
 - Spherical
 - Aspheric
- Combo
- **Simultaneous Vision** – A brain thing

CONCENTRIC



ASPHERIC

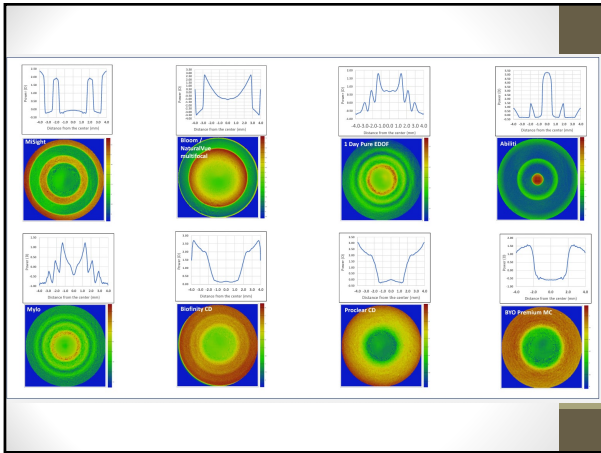


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Understanding Designs

- A study performed by Dr. Eef van der Worp & Giancarlo Montani (1st place winner at GSLS)
- Looked at the power profile of Soft MF lenses
 - Specifically on Myopia Management Lens Designs
- The optical radial power profiles were measured using the NIMO EVO optical lens analyzer

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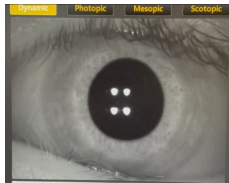


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Why didn't it work?

- **96% Success if you use the fitting guide**
- Design of the lens – not working for the patient
- Simultaneous vision – non adapt
- Poor fit – too steep or flat eye
- Defective Lens

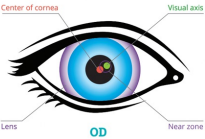
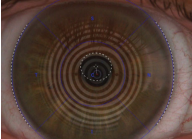
- Pupil Size
- Pupil Decentration
- Residual Astigmatism



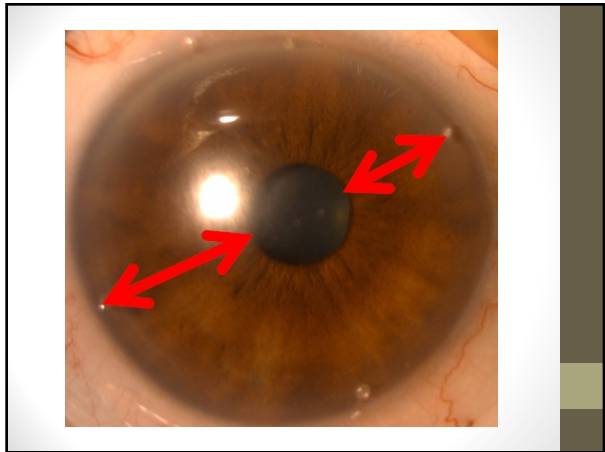
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Natural Misaligned Optics

- Line of sight and Geometric center of the eye do not match
- LOS typically Superior Nasal
- Use photos & Topographers


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Pupil Measurements

- Equipment to measure



The screenshot shows a software interface for pupil measurements. On the left, there are sections for 'AVERAGE VALUES' (Mean: 1.98 mm, Std Dev: 0.36 mm), 'PUPIL CENTER' (X: 0.07 mm, Y: -0.05 mm, Std Dev: 0.36 mm), and 'CURRENT VALUES' (Diameter: 1.68 mm, X: 0.03 mm, Y: -0.03 mm). The center features a live video feed of an eye with a red ring centered on the pupil. On the right, there are controls for 'Ring center', 'Pupil', 'Grid', 'Rulers', and 'Graphs'.

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Measuring Misalignments

- Equipment – OVITZ, MYAH

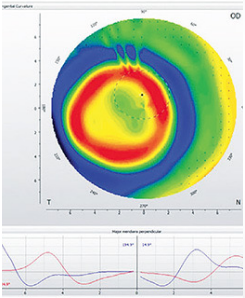


The top part shows two pieces of equipment: the OVITZ and MYAH. Below are two screenshots of their software interfaces. The left screenshot shows a 'Diameter' of 0.64 mm and 'Decentration' values (X: 0.04 mm, Y: -0.09 mm). The right screenshot shows a 'Diameter' of 0.64 mm and 'Decentration' values (X: 0.04 mm, Y: -0.09 mm). Both screenshots show a circular target with a green ring and a red center.

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Topography

- Evaluate topography of the cornea
- Take a second topography over the multifocal lens
- Take both images and view the difference Map




The topography map shows a circular color-coded surface of the cornea. Below it is a 'Difference Map' showing the difference between two topographies. The text 'Photo Courtesy of Dr. Susan Resnik 2021, Opt Man' is at the bottom.

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Higher Order Aberration Optics

- Many methods to measure HOA – iTrace, OPD, OVITZ, Pentacam
- Talking about it forever – since custom lasik
- Calculate the aberrations in each layer of the ocular system
 - Front surface of the cornea
 - Back surface of the cornea (KCN)
 - Aberrations of the Lens
- Interlayer misalignments

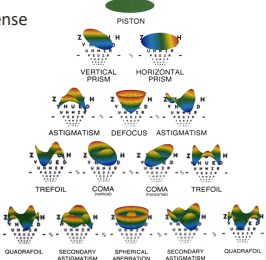


The schematic shows a lens with a curved surface. The Zernike Bar Plot shows a series of bars representing different aberrations.

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Incorporating HOA analysis

- When vision doesn't make sense
- A lot of astigmatism
- KCN or irregular corneal astigmatism
- Just for fun



The pyramid diagram shows various types of HOA: PISTON, VERTICAL PRISM, HORIZONTAL PRISM, ASTIGMATISM, DEFOCUS, ASTIGMATISM, TREFOIL, CDMA, CDMA, TREFOIL, QUADRIFOIL, SECONDARY ASTIGMATISM, SPHERICAL ABERRATION, SECONDARY ASTIGMATISM, and QUADRIFOIL.

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OD Barriers & Strategies to Overcome

- Stigma that they don't work**
 - Use the fitting guide to prove this wrong
 - Start Early for greater VA success
- Too much Chair**
 - The Discovery/Recommendation Method
 - Set realistic expectations
 - Use the fitting guide to prove this wrong
 - Phone follow Ups by Staff to reduce chair time
 - If a problem exists - come in
 - If no issues order lenses
- Reduce Glasses sales**
 - Glasses first – CL's second – BOTH – NO CHOICE

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Remember our impact ...
... We Change Lives

Thank You



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