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**Scleral Multifocals Made Simple**

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1 hour

Category: Contact Lenses

OD Education

**Summary**

Fitting scleral multifocal is often not on the top of everyone's favorite to do list. Multifocal fitting of scleral lenses is often a challenge and working with scleral lenses can be intimidating. In this course we will review patient selection tips, communication strategies to improve success, multifocal lens designs, troubleshooting strategies and new technology. Customization of multifocal designs along with the use of technology will be reviewed. Decentering optics and applying HOA optics to lenses will also be covered. With all the new technology we have, fitting multifocal lenses just got a lot more interesting.

**Learning objectives**

1. To have the tips and tricks to effective communication expectations of both presbyopia and a multifocal fit.
2. To have a step by step strategy to fitting multifocal lenses, regardless of design type.
3. To understand the importance of a good scleral lens fit before starting
4. To understand the use of customized optics including decentering optics, optic zone size and add power distribution patterns.

5. To understand the use of HOA optics and the impact on multifocal lens designs.

### **Course Outline**

- 1) Understanding Presbyopia
  - a. Demographics and stats
  - b. Why presbyopes struggle
  - c. The misconceptions about aging
  - d. Why there is failure with fitting multifocal lenses
  - e. The concerns that patients have
- 2) How to explain presbyopia to deal with all questions with the system of 10 units.
  - a. 10 units of change over 30 years
  - b. How to track a patient's concerns
  - c. The difference between progressives and soft multifocal lenses designs
  - d. How images will help you
  - e. Understanding the difference between presbyopia and accommodative fatigue and how they relate.
  - f. Finding a new excuse for instead of aging
  - g. The importance of communication in explaining presbyopia
  - h. The importance of starting the conversation early
  - i. How communication will help you with your fitting success
- 3) What you need to know from your lab
  - a. What is the design of the lens
  - b. Center Near, Center Distance or both
  - c. Spherical, aspheric, concentric or combo designs
  - d. Bifocal or trifocal segments
  - e. Front surface, back surface or dual aspheric designs
  - f. Optic zone size & ability to change
  - g. Add power range possible
  - h. Are there fitting sets for MFs
  - i. Are there fitting guides
  - j. Warranties and Costs
- 4) Understanding Scleral Lens multifocal lens designs
  - a. How the pattern do not follow all traditional optics
  - b. How are they different from soft MFs
  - c. The difference between progressives and multifocal lenses
  - d. Exploring the difference designs
  - e. Ring patterns
  - f. Simultaneous vision
  - g. How over refractions really are impacting our vision

- 5) What are the basic fitting steps to apply to all multifocal lenses
  - a. Before you start
    - i. Ocular Surface
    - ii. Documentation
  - b. Fitting of lenses
    - i. Trial Fitting
    - ii. Empirical
    - iii. Profilometry based – Free Form
    - iv. Impression Based
  - c. Important fitting tips
    - i. centration
  - d. Information Needed
  - e. Refraction strategies
  - f. Eye dominance
  - g. Initial lens selection
    - i. Trial lens selection
    - ii. Profilometry based
  - h. Importance of the application/settling and adaptation
  - i. Assessing the fit
  - j. Assessing vision
  - k. Troubleshooting issues
    - i. Binocular distance over refraction
    - ii. Fitting guides
  - l. The follow up strategies
- 6) Why there is failure with fitting multifocal lenses & how to solve the issue
  - a. It doesn't always work
  - b. The design
  - c. The motivation
  - d. The alignment and fit
  - e. The expectations
  - f. Pupil Size
    - i. How to measure
    - ii. How to factor this in to your design
  - g. Decentration
    - i. Lens Decentration
    - ii. Pupil Centration
    - iii. Customization
  - h. Simultaneous Vision Issues
- 7) Toric Scleral Multifocals
  - a. When to consider
  - b. Flexure
  - c. Rotation
  - d. Fitting tips
  - e. Front surface torics

f. Can you do both Front Torics and MFs

8) Decentering Optics

- a. identifying patients that could benefit from this
- b. How to design lenses with decentered optics
- c. Calculators
- d. Images
- e. Fitting options

9) Higher Order Aberrations

- a. How to measure
- b. How to factor them into your process
- c. Impact of correcting HOA

10) Order of operations

- a. Perfect the fit
- b. Ensure Centration
- c. Best distance sphere correction
- d. HOA to consider
- e. Correct Astigmatism
- f. Decentered optical design

11) How does modified monovision work?

- a. When to consider?
- b. What are the rules to fit this design?