

Top Technology to Crack the Myopia Code

Speakers:

**Dr Oliver Woo, OD | Vishakha Thakrar, OD | Professor Mark Bullimore, PhD |
Richard Wu, OD | Li Lian Foo, MD, FRCOphth, MMed (Ophth)**

Course Description:

Myopia is a common eye condition in our practice or clinic. Myopia Management has been a most discussed and hottest topic in the eye care profession in the last few years. Many interventions and evidenced-based methods are proven effective in slowing myopia progression and axial length elongation. We have four internationally renowned speakers from different disciplines and globally to share their insights and real-life clinical experiences in managing myopia and how we can crack the myopia code.

Course Objectives:

Upon completion of this lecture, the delegates should understand:

1. The importance of axial length (AXL) in myopia management and the true meaning of AXL to refractive error in our myopia managing journey.
2. The update of the myopia management ophthalmic lens options available globally and tips on dispensing them and the aftercare service.
3. The optimal dosage of atropine in myopia management for each scenario and the combination therapy treatment.
4. The latest design in Orthokeratology lenses globally and application
5. How to apply the myopia management options and confidently crack the myopia code.

I. Introduction

- a. Introduction to format and speaker presentation

II. Axial Length in Myopia Management

- a. The relationship between axial length and refractive error
 - i. An overview of the importance of axial length in managing myopia
 - ii. The true meaning of D (diopter) and mm (millimetre) in myopia
- b. Age and racial differences
 - i. The onset of myopia in different ethnic groups
 - ii. Axial length differences in different ethnic groups
 - iii. How to determine the onset and when to intervene
- c. What are the optimal ways to measure and monitor axial length?
 - i. A-scan is better than optical biometry.
 - ii. Variation in time of measurement
 - iii. The difference between cycloplegic and non-cycloplegic measurement
- d. How to use axial length to determine the treatment impact and effectiveness.
 - i. Using the different reference charts and software to compare the effectiveness of the treatment.
- e. Standard of care now or in the future?
 - i. Yes or No?
- f. The importance of axial length in myopia management from an ophthalmologist's view

III. Atropine in Myopia Management

- a. Dosage
 - i. The comparison of different concentrations/dosages in myopia management
 - ii. Overview of the latest studies
- b. Usage
 - i. Day or Night

- ii. Pupil dilation concern.
 - iii. Efficacy in combined treatment
- c. Effectiveness
 - i. 0.01% still useful
 - ii. Which one should start to use
- d. Combination treatment
 - i. The Pros and Cons
 - ii. Combine with which option is optimal.
 - iii. Is it a MUST?

IV. Myopic management ophthalmic lenses in Myopia Management

- a. Update of the latest designs available in the market
 - i. Defocus Incorporated Multiple Segments (DIMS)
 - ii. Highly Aspherical Lenslet Target Technology (HALT)
 - iii. Diffusion Optics Technology (DOTS)
 - iv. Cylindrical Annular Refractive Element (CARE)
 - v. More to come.
- b. Comparison of each design efficacy
 - i. Overview of the clinical study and published data
- c. Which design is the optimal one for myopia management?
 - i. Real live clinical experience and data
- d. Combined treatment?
 - i. Combine with atropine.
 - ii. Combine with myopia management SCL.
 - iii. Combine with all.
- e. Dosage for low Rx and higher Rx
 - i. The wearing pattern recommendation
 - ii. Effectiveness in low Rx vs high Rx
- f. Dispensing tips
 - i. The requirement in frame selection

- g. Aftercare schedule
 - i. Optimal management schedule

V. Latest designs in Myopia Management

- a. Current Status in Myopia Management
 - i. Overnight Orthokeratology
 - ii. Daily Contact Lenses
 - iii. Soft Contact Lenses
 - 1. Daily disposable
 - 2. Custom Soft
 - iv. RGP lens
 - v. Pharmaceutical
 - vi. Spectacle
- b. The latest design in Overnight Orthokeratology lenses
 - i. , Advanced topographic-assisted design
 - ii. Optimized design with fully customised design
 - iii. Software-based fitting and troubleshooting
- c. The latest design in Daily Contact Lenses
 - i. SCL for myopia management
 - ii. Color lenses
- d. The latest design in Pharmaceutical
 - i. Atropine
 - ii. iRNA
- e. Latest design in Spectacle
 - i. Peripheral defocus
 - ii. Lenslet
 - iii. STOP
- f. What is next in Myopia Management?
 - i. Global trend approach in myopia management
 - 1. Environmental Control
 - 2. Monitoring Near Task

3. Light Management

a. Red Light Therapy

g. AI in myopia management

i. Software

h. Early intervention

i. How can we improve implementation?

ii. Easy access

iii. Handheld devices on axial length measurement

i. Conclusion

VI. Optimize Your Orthokeratology Corneal Topography for Myopia Control

a. Introduction to corneal topography post-OK lens treatment.

a. Discovering the treatment zone profile.

b. Best corrected vision vs. best myopia control outcome post-OK treatment.

a. Myopia control and vision are double-sided swords.

c. New trends on the corneal topography outcome post-OK.

a. Understand the needs of your patient.

b. Biometric profile vs. treatment zone designs.

d. What to look for in a corneal topography post-OK to optimal myopia control.

a. Defocus amount.

b. Treatment zone diameter.

e. Concept of retinal adaption.

f. How does retinal adaption play a vital role in OK treatment?

a. Reduce efficiency over time.

g. Take home points.

a. How to improve myopia control efficacy by examining corneal topography.

b. Thinking out of the box on using different lens designs on the same patient

VII. Panel discussion in Myopia Management

a. Case studies

i. 2-3 case studies will be discussed among the speakers.

b. Q&A time with the audience