

Eye to Eye with Melton and Thomas

2 hrs

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This course will update the clinician in the latest advances in the medical management of eye diseases. The discussion will center around current and evolving trends in the eye care world. Emphasis will be given to sharpening the clinician's skills in diagnosing and medically managing ocular disease entities. The lecture team will share helpful clinical pearls that they have accumulated from years of clinical practice while remaining immersed in the latest medical research and literature.

Learning Objectives:

- Gain a practical, clinical base of information regarding the current trends in medical management
- Perform a comprehensive evaluation to diagnose ocular conditions and discuss treatment options
- Assimilate information from various forms of research materials and literature as it applies to diagnosis and treatment of eye disorders.
- Apply knowledge to make an informed choice on the use of various drugs and treatment modalities
- Review medical management options to gain confidence in assessment and treatment of challenges
- Gain motivation to read the literature in order to keep up with the quickly changing advances in medical management

1. Welcome & Disclosures

- Introduce presenters
- Financial disclosures: ICARE, B+L
- Emphasize transparency and conflict mitigation

2. Review of Peer-Reviewed Ocular Disease Diagnosis & Treatment Resources

- Journals
 - American Journal of Ophthalmology
 - Ophthalmology
 - JAMA Ophthalmology
 - Survey of Ophthalmology
- Textbooks
 - Kanski – Clinical Ophthalmology

3. Compassion in Patient Care

- Decline in societal compassion
- EMR burden vs. patient connection
- Patient Survey Results
 - Patients value kindness over credentials
 - Connection & caring over education/experience/wait time/cost

4. Future of Optometric Practice

- Medical eye care growth: +28% vs. routine care +2%
- Aging population and demand surge
- Optometry's role/opportunity in bridging the care gap

5. YAG Laser Capsulotomy Surgeries

- Patient Access to Care
- Savings to Healthcare system
- Patient Satisfaction results

6. On-Call Services, ED Coverage, & Grand Rounds

- Coverage considerations
- Role of Optometry
- Crises in emergency eye care
- Ethical obligation and community integration
- Some commonly encountered on-call conditions
 - Subconjunctival Hemorrhage – diagnosis & treatment
 - Corneal Abrasions – diagnosis & treatment
 - Recurrent Corneal Erosion – diagnosis & treatment
 - New Anterior Stromal Puncture (ASP) Device
 - Review of ASP Technique & Followup

7. In-Office Pharmaceuticals Update

- **Dilation Reversal**
 - **Ryzumvi™ (phentolamine)**
 - Alpha-1 blockade mechanism
 - Dosing, storage, and efficacy timeline
 - Clinical implications for workflow and patient comfort
- **Cycloplegia Alternatives & Considerations**
 - Mydcombi (tropicamide vs. cyclopentolate)
 - Drug delivery device

- Pediatric refractive accuracy
- Implications for brown irides

8. New & Emerging Presbyopia Pharmaceuticals:

- **Vuity™, Qlosi™**
 - Pilocarpine formulations
 - Mechanism of Action
 - Dosing
 - Side effects & retinal detachment risk
 - Patient selection, efficacy, & counseling
- **Vizz™**
 - Aceclidine formulation
 - Mechanism of Action
 - Dosing
 - Side effects & retinal detachment risk
 - Patient selection, efficacy, & counseling

9. Ultra-Widefield Imaging

- Strengths
 - DR severity grading
 - Review Early Treatment Diabetic Retinopathy Study (ETDRS)
 - Review of peripheral pathology captured
- Limitations
 - Missed superior quadrant tears
- Clinical caution: don't replace fundus exam

10. Retinal Detachment (RD) Risks & Protocols

- Malpractice trends and missed RD diagnoses
- Review signs/symptoms of RD
- ED triage criteria for flashes/floaters
- Retinal tear risk factors
 - Acute Posterior Vitreous Detachment (PVD)
 - Retinal tear association with PVD
- Appropriate follow-up timing after PVD events
- IRIS Registry review of RD with acute PVD

11. Incretins & GLP-1RA

- Review of Common GLP-1s
 - Tirzepatide
 - Semaglutide
 - Dulaglutide
 - Exenatide
 - Liraglutide
- Indications/Uses
 - Weight loss
- Mechanism of Action
- Complications/Side Effects
 - DR worsening
 - NAION risk debate
 - Protective effects on glaucoma risk?

12. SGLT-2 Inhibitors

- Mechanism of actions
- Medications on market
 - Empagliflozin
 - Dapagliflozin
 - Canagliflozin
- Current Prescribing Trends
- Implications for DR patients
- Monitoring recommendations

13. Dry Eye Disease: Inflammation Focus

- Pathophysiology and definition
- Consensus diagnosis: slit lamp + fluorescein
- Therapies
 - Steroid pulse therapy
 - Anti-inflammatory strategies
- Other Diagnostic Tools
 - Patient Surveys/Questionnaires
 - Meibography\
 - Osmolairty
 - MMP-9

- Miscellaneous
- TFOS DEWS II Management & Therapy Recommendations
- Effect of Dry Eye on Pre-Surgical Evaluation

14. Femto vs. Phaco Cataract Surgery: Is there a Clear Winner?

- Meta-analysis findings
- Cost vs. outcome comparison
- AAO position and patient counseling

15. New & Emerging Therapies for DED

- Anti-Inflammatories
 - BYQLOVI™
 - Eysuvis™
 - Vevye™
- Anit-evaporatives
 - Meibo™
- Mechanisms, dosing, and clinical pearls of each
- Algorithmic approach to therapy
- Nutraceuticals
 - Re-esterified Triglyceride Omega-3 Fatty Acids & Recent Study Results
 - Blink Nutritears™ & clinical data
- Role of punctal plugs & their efficacy
- Nasal & Neuromodulator Therapies
 - Tyrvaya™
 - Tryptyr™
 - Mechanisms: cholinergic and TRPM8
 - Tear stimulation and patient selection
- Orals
 - Doxycycline dosing & results
 - Azithromycin dosing & results
 - New compounded topical formulation
- Autologous Serum Tears

16. Neuropathic Corneal Pain Management

- Diagnosis: IVCN, symptoms vs. signs
- Low-dose naltrexone protocol

- NK overview
 - Signs/Symptoms
 - Other Pharmaceutical Therapies
 - Oxervate™

17. Procedural Options for Meibomian Gland Disease with technique review

- Thermal meibum warming
- Meibomian gland scraping
- Meibomian gland expression

18. Final Pearls & Preventive Care

- Shingles & HZO: Shingrix advocacy
- Fortisite™ for corneal ulcers
- PCR vs. culturing
- Closing remarks & Q&A