The Minnesota Eye Foundation

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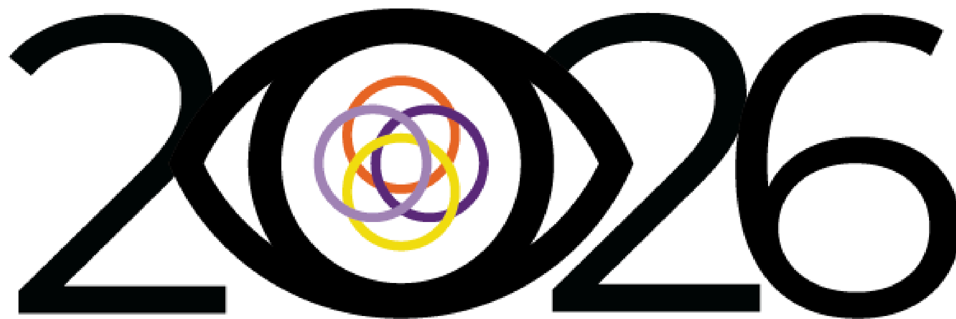

Monday, May 18, 2026

The Metropolitan Ballroom & Clubroom

COPE Activity ID #

LIVE Activity: #132948

Virtual Activity: #132949

PERSPECTIVES IN EYE CARE 2026

MINNESOTA EYE FOUNDATION

On behalf of the Minnesota Eye Foundation, we are pleased to welcome you to the 2026 Perspectives in Eye Care program. For more than 32 years, our community's support and participation have been exceptional, and we are proud to provide high-quality continuing professional education.

The realm of vision care continues to evolve rapidly, and we are grateful to feature local doctors and medical professionals who are leading the way in proactive, respected care. MEF appreciates your participation in this interactive forum, which addresses today's most timely topics in vision care.

Today's program offers a wide range of learning opportunities with our esteemed faculty, dedicated time to connect with colleagues, and a chance to learn more about the Minnesota Eye Foundation (MEF)'s outreach and mission.

In 2005, MEF was established to enrich the quality of life in our community through charitable outreach and continuing education in the field of vision care. Today, you will also hear more about the Foundation's work—especially The Vision Project—and our newest fundraiser, VisionFestMN.

Please save the date for **Saturday, September 19, 2026, for VisionFestMN**—our inaugural music-concert fundraiser featuring three local bands:

- Veil of Dreams
- The Atomic Beat Band
- The Teardowns

We are thrilled to host a family-friendly evening of great music, a silent auction, and a mini-market. More details will follow, and we would welcome your participation, sponsorship and attendance at the **Como Lakeside Pavillion in St. Paul, MN**. Proceeds from VisionFestMN will support MEF's signature program, the Vision Project.

Thank you for joining us for today's Perspectives event. We are grateful for your commitment to continuing education and to the Minnesota Eye Foundation's mission

Omar E. Awad, MD, F.A.C.S
President, Minnesota Eye Foundation

COPE CREDITS

We are using the following to verify attendance for this program.

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MINNESOTA EYE
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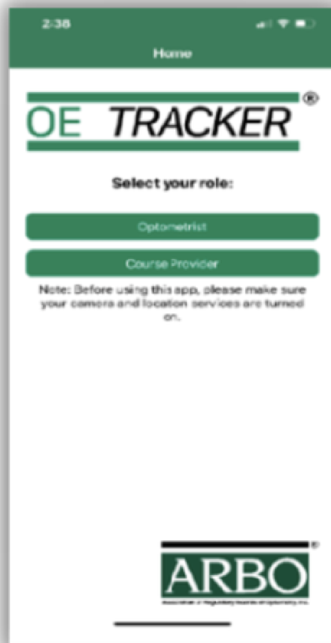

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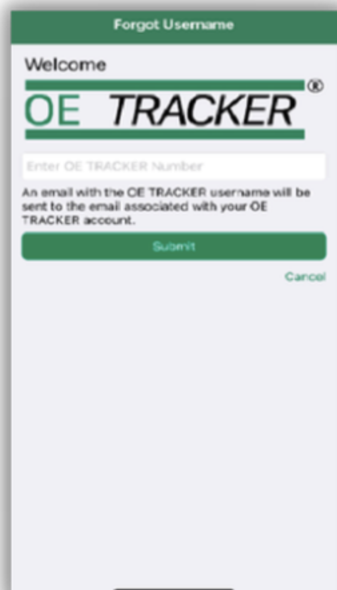

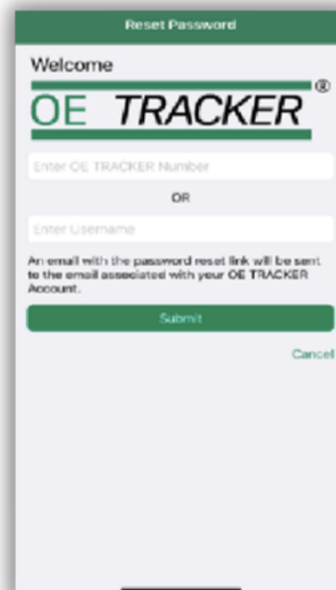

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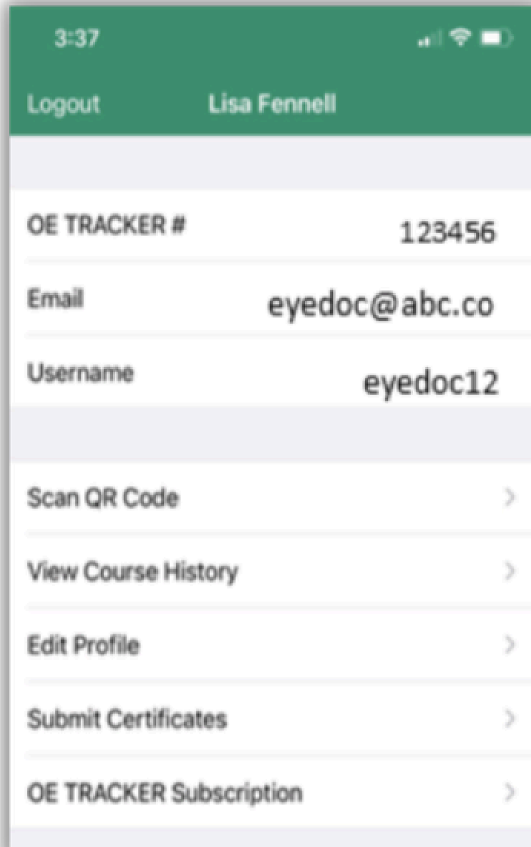

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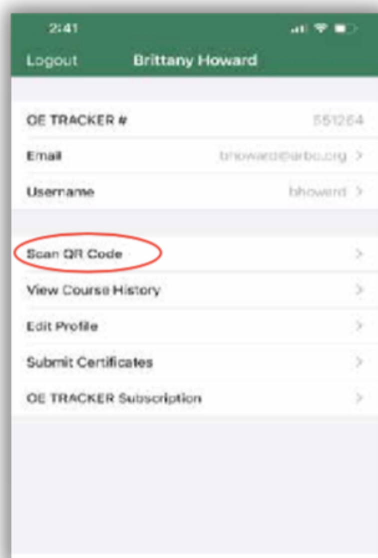

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6. To exit, simply close the app. You will stay logged in to the app to scan another QR code. To log out of the app touch the “Logout” button.

AGENDA 2026

7:55 AM - Welcome & Announcements

SESSION ONE

8:00 AM - Skull Base Surgery for Tumors of the Orbit and Optic Pathway
U of M Skull-Based Team

8:50 AM - Interesting Pediatric Cases
Kari Fossum, MD - Northwest Eye Clinic

9:40 AM - Break in Exhibit Area

10:00 AM - Developments in Adult Strabismus: Pathogenesis and Surgical Management
Collin McClelland, MD - Northwest Eye Clinic

10:50 AM - The Vision Project & Vision Fest
Omar E. Awad, MD, FACS; Joshua T. King, MD

11:20 AM - Announcements

11:30 PM - Lunch in Exhibit Area

SESSION TWO

12:30 PM - Peripheral Perils: A Comprehensive Guide to Peripheral Retinal Pathologies
Hossein K. Nazari, MD, Ph.D

1:20 PM - Oculoplastics Update: Old Dog, New Tricks
Jill S. Melicher, MD, Minnesota Eye Consultants

1:20 PM - The Paradigm Shift of Interventional Glaucoma
Thomas Samuelson, MD; Patrick Riedel, MD; Christine Larsen, MD; Clara M. Choo, MD; Chase A. Liaboe, MD; Mark Buboltz, OD, FAAO; Ahmad Fahmy, OD, FAAO - Minnesota Eye Consultants

3:10 PM - Break in Exhibit Area

3:20 PM - Confident Conversations: Patient Education Skills That Elevate Your Practice
Troy Cole, Catalyst-in-Chief, LogiCole Consulting, LLC

4:10 PM - Modern Cataract Care: A Collaborative Case Panel
David Hardten, MD, FACS; Sherman Reeves, MD, MPH; Mark Hansen, MD; Omar Awad, MD, FACS; Mona Fahmy, OD, FAAO; Noumia Cloutier-Gill, OD, FAAO

5:00 PM - Adjourn and Cocktail Reception

CONTENTS

SESSION ONE

Skull Base Surgery for Tumors of the Orbit and Optic Pathway 13
U of M Skull-Based Team

Interesting Pediatric Cases 17
Kari Fossum, MD - Northwest Eye Clinic

Developments in Adult Strabismus: Pathogenesis and Surgical Management 21
Collin McClelland, MD - Northwest Eye Clinic

SESSION TWO

Peripheral Perils: A Comprehensive Guide to Peripheral Retinal Pathologies 27
Hossein K. Nazari, MD, Ph.D

Oculoplastics Update: Old Dog, New Tricks 32
Jill S. Melicher, MD, Minnesota Eye Consultants

The Paradigm Shift of Interventional Glaucoma 37
Thomas Samuelson, MD; Patrick Riedel, MD; Christine Larsen, MD; Clara M. Choo, MD; Chase A. Liaboe, MD; Mark Buboltz, OD, FAAO; Ahmad Fahmy, OD, FAAO - Minnesota Eye Consultants

Confident Conversations: Patient Education Skills That Elevate Your Practice 52
Troy Cole, Catalyst-in-Chief, LogiCole Consulting, LLC

Modern Cataract Care: A Collaborative Case Panel 56
David Hardten, MD, FACS; Sherman Reeves, MD, MPH; Mark Hansen, MD; Omar Awad, MD, FACS; Mona Fahmy, OD, FAAO; Noumia Cloutier-Gill, OD, FAAO

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SESSION ONE

University of Minnesota
Department of Otolaryngology - Head & Neck Surgery

Skull Base Surgery for Tumors of the Orbit and Optic Pathway

COPE Course ID #
Synchronous-LIVE: 103741-GO
Synchronous-Virtual: 103742-GO

Skull Base Team

University of Minnesota
A multidisciplinary team that consists of neurosurgeons, otolaryngologists, radiation oncologists, endocrinologists, neuro-ophthalmologists, radiologists, and reconstructive surgeons.

Course Description

This course reviews surgical approaches used to treat tumors located behind the eye and along the skull base that may affect the visual pathway. Emphasis will be placed on relevant anatomy, tumor types, and how these conditions may impact vision. The course will help optometrists recognize clinical findings and understand when a referral for specialty care is appropriate.

Course Objective

1. **We will describe the clinical indications for endonasal and transorbital surgery approaches in the management of orbital and skull base lesions affecting the visual pathway.**
2. **We will identify current limitations and considerations associated with transorbital nasal and neuroendoscopic surgical techniques.**
3. **We will explain the role of multidisciplinary management in the care of patients with complex orbital, nasal, and skull base conditions.**

Skull Base Surgery for Tumors of the Orbit and Optic Pathway

University of Minnesota Skull Base Team

1. INTRODUCTION:
    a. Overview of skull base pathology and its clinical relevance to eye care providers
    b. Importance of recognizing neuro-ophthalmic manifestations of skull base disease
    c. Role of optometrists in early detection, referral, and co-management of patients with intracranial pathology
2. FINANCIAL DISCLOSURES:
    a. Presenter financial disclosures
3. THE SKULL BASE:
    a. Cranial base
        i. Structural components of the anterior, middle, and posterior cranial fossae
    b. Orbit
        i. Orbital apex anatomy
        ii. Optic nerve and surrounding structures
    c. Pituitary gland
        i. Relationship to the optic chiasm and visual pathways
    d. Cerebrovasculature
        i. Clinical implications of vascular compromise
    e. Brainstem
        i. Potential visual and neurologic manifestations of brainstem pathology
4. PRINCIPLES OF SKULL BASE SURGERY:
    a. Surgical strategies to maximize tumor exposure while minimizing neurologic injury
    b. Gain exposure but avoid brain retraction
    c. Preserve cranial nerve function
    d. Protect circulation
5. GOALS OF SKULL BASE SURGERY:
    a. Factors influencing surgical planning and management:
        i. Age/comorbidities
        ii. Patient's treatment goals and quality of life considerations
        iii. Probable diagnoses
        iv. Growth potential and biological behavior
        v. Tumor location and surrounding anatomy
6. SURGICAL APPROACHES:
    a. Transcranial (traditional) approaches
        i. Traditional open surgical techniques
    b. Minimally invasive approaches
        i. Endoscopic endonasal approaches
        ii. Combination approaches

7. BRAIN TUMOR TYPES:
    a. Malignant
        i. Examples and general characteristics
    b. Non-Malignant
        i. Common benign skull based lesions
        ii. Potential effects on visual structures
8. SUBSPECIALTY FOCUS AND OUTCOMES:
    a. Multidisciplinary management involving neurosurgery, otolaryngology, and ophthalmology
    b. Expected surgical outcomes and complication considerations c. Implications for visual function and optometric follow-up care
9. QUESTIONS/KEY CLINICAL TAKEAWAYS:

Notes:

Kari Fossum, MD

Kari Fossum, MD
Northwest Eye
Pediatric Ophthalmology and Pediatric Eye Alignment Specialist

Interesting Pediatric Cases

COPE Course #:
Synchronous Live: 104344-TD
Synchronous Virtual: 104345-TD

Course Description

Discuss pediatric ophthalmology through case presentations with an
emphasis in diagnosis, management and clinical decision-making for blepharokeratoconjunctivitis, failed vision screening, subluxed lens, pediatric retinal detachments, and combined hamartoma of the retina and retinal pigment epithelium.

Course Objective

1. Understand key diagnosis strategies for blepharokeratoconjunctivits and appropriate treatment options.
2. Discuss approach to failed vision screening and when to prescribe glasses.
3. Discuss diagnosis and treatment of subluxed lenses and further systemic work up needed following diagnosis.
4. Discuss etiology and work up of retinal detachments in children specifically retinopathy of prematurity, familial exudative vitreoretinopathy and trauma.

Interesting Pediatric Cases

Kari Fossum, MD

1. Financial disclosure
2. Presentation overview
    a. a. Purpose of case-based pediatric eye care review
    b. Importance of recognizing uncommon pediatric ocular findings
    c. Role of optometrists in early diagnosis, referral, and management
    d. Learning objectives
3. Case 1: Blepharokeratoconjunctivitis (BKC)
    a. Patient history and presenting symptoms
    b. Visual acuity and intraocular pressure findings
    c. Anterior segment/fundus examination findings
    d. Posterior segment/fundus examination findings
    e. Differential diagnosis and final diagnosis of BKC
    f. Etiology and pathophysiology of pediatric BKC
    g. Diagnosis – blepharokeratoconjunctivitis (BKC)
        i. Clinical signs used in diagnosis
    h. Management strategies
        i. Lid hygiene
        ii. Medical therapy
        iii. Follow up care
    i. Patient response to treatment and long-term monitoring considerations
4. Case 2: Failed Vision Screening and Optic Nerve Hypoplasia
    a. Patient history and reason for referral
    b. Review of failed vision screenings and clinical approach to pediatric screening failures
    c. Guidelines for prescribing glasses in pediatric patients
    d. Overview of amblyopia and treatment strategies
    e. Patient exam – vision etc
    f. Comprehensive examination findings
        i. Including visual acuity
    g. Anterior segment evaluation
    h. Dilated fundus examination with imaging review
    i. Diagnosis of subluxed lens
    j. Discuss etiology
    k. Discuss natural course of disease and visual prognosis
    l. Discuss systemic associations and further work up
    m. Follow up care and monitoring plan

5. Case 3: Pediatric Cataract and Retinal Detachment
    a. Patient history and presenting complaint
    b. Examination findings, including visual acuity
    c. Anterior segment findings with acquired cataract
    d. Etiologies of acquired cataracts in pediatric patients
    e. Posterior segment examination findings
    f. Common causes of retinal detachments in children
    g. Case progression leading to diagnosis
    h. Discuss etiology retinopathy of prematurity
        i. Etiology
        ii. Risk factors
    i. Natural course and long-term retinal complications of retinopathy of prematurity
    j. Discuss familial exudative vitreoretinopathy:
        i. Presentation considerations
        ii. Management considerations
6. Case 4: Trauma-Related Pediatric Retinal Detachment
    a. Patient history and mechanism of injury

Notes:

SESSION ONE

Collin McClelland, MD

Collin McClelland, MD
Northwest Eye
Neuro-Ophthalmologist & Adult
Strabismus Surgeon

Developments in Adult Strabismus: Pathogenesis and Surgical Management

COPE Course #:
Synchronous LIVE: 104456-NO
Synchronous Virtual: 104457-NO

Course Description

This case-based course will outline major updates in the understanding and surgical treatment of adult strabismus including the mechanism behind sagging eye syndrome and the utility of adjustable suture strabismus surgery.

Course Objective

1. Identify the current proposed mechanism for neurologically isolated age-related distance esotropia (also known as sagging eye syndrome).
2. We will discuss the red flag clinical features that suggest a neurological cause for divergence insufficiency esotropia.
3. Discuss the advantages and disadvantages of adjustable suture strabismus surgery technique.

Developments in Adult Strabismus: Pathogenesis and Surgical Management

Collin McClelland, MD

1. ***Financial Disclosures:***
    a. No Relevant Financial Disclosures
    b. Course overview and learning goals
2. ***Adult Strabismus Overview:***
    a. Definition and common presentations of adult strabismus
    b. Prevalence of adult-onset ocular misalignment
    c. Symptoms associated with binocular diplopia
    d. Functional impact on driving, reading, and mobility
    e. Psychosocial and quality-of-life considerations
    f. Importance of timely recognition and referral
3. ***Case Presentation***
    a. 85-year-old patient with intermittent binocular diplopia
    b. 5-year history of intermittent binocular diplopia
    c. Images horizontal to one another
    d. Diplopia present in all gaze positions
    e. Symptoms only occurring at distance only (not near)
    f. Sensorimotor examination findings
        i. Alternate cover testing review
        ii. Near alignment measurements
        iii. Distance deviation measurements
        iv. Comitant versus incomitant deviation patterns
        v. Motility assessment findings
    g. Interpretation of exam data in adult diplopia cases
4. ***Differential Diagnosis of Adult Esotropia***
    a. 6th nerve palsy(ies)
    b. Myasthenia gravis
    c. Thyroid Eye Disease
    d. Decompensated congenital esophoria
    e. Cerebellar / “central” esotropia
5. ***Divergence Insufficiency Esotropia:***
    a. Divergence paresis esotropia
    b. Clinical characteristics
        i. Distance esotropia that decreases at near
        ii. Symptomatic at distance only
        iii. Comitant (occurs in all gaze directions)
        iv. Slow onset and slow progression
    c. Neurologically isolated
        i. No nystagmus
        ii. Normal saccades
        iii. Full motility*

6. Pathogenesis and Sagging Eye Syndrome

a. Historical theories of divergence paresis
b. Limitations of cranial nerve VI palsy theory
c. Review of supranuclear divergence center theory
d. Orbital connective tissue degeneration
e. Symmetric lateral rectus sagging
f. Asymmetric sagging causing vertical deviations
g. Associated eyelid findings in older adults

i. Superior sulcus hollowing
ii. High lid crease
iii. Ptosis

7. Identifying Secondary Causes

a. Clinical signs suggesting non-isolated disease

i. Nystagmus
ii. Acute onset
iii. Motility deficits
iv. Papilledema
v. Younger age presentation
vi. Eyelid retraction

b. Common secondary neurologic etiologies

8. Diagnostic Work-Up

a. When no additional work-up is required
b. Indications for MRI brain and orbits with contrast
c. Evaluation for thyroid eye disease
d. Evaluation for myasthenia gravis
e. Assessment for cerebellar or demyelinating disease
f. Intracranial pressure considerations

9. Non-Surgical Management

a. Prism correction as first line treatment
b. Patient selection for prism therapy
c. Expected success rates and limitations

10. Surgical Management of Adult Strabismus

a. Indications for surgery in symptomatic patients
b. Surgical dosing considerations
c. Medial rectus recession strategies
d. Heavy eye syndrome considerations
e. Postoperative alignment goals

11. Adjustable Suture Strabismus Surgery

a. History and evolution of technique

b. Sliding noose and adjustable approaches

c. Advantages

    i. Tailored surgical dosing

    ii. Helpful in restrictive cases

    iii. Helpful in paretic cases

d. Limitations and contraindications

    i. Time intensive

    ii. Patient anxiety

    iii. Variable long-term outcomes

e. Evidence comparing adjustable vs non-adjustable techniques

12. Post-Operative Assessment and Outcomes

a. Immediate postoperative alignment testing

b. Diplopia improvement

c. Cosmetic alignment outcomes

d. Reoperation considerations

13. Conclusions

a. Sagging eye syndrome as a common age-related cause of adult distance diplopia

b. Most cases are benign, but secondary causes must be recognized

c. Careful examination guides need for imaging and referral

d. Prism therapy remains highly effective for many patients

e. Adjustable suture surgery can improve outcomes in selected cases

14. Questions?

Notes:

visionfest MN

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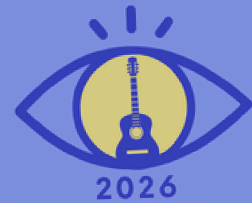

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SEPTEMBER 19,2026
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Support the Minnesota Eye Foundation at VisionFestMN – an evening of live music, community and spirit of giving back. Proceeds fund vision-restoring surgeries for the community's uninsured patients who are in need of life-changing cataract and glaucoma procedures.

Food & Beverage will be available for purchase onsite at the Dock & Paddle Restaurant.

More information to come for **PreSale Tickets at www.mneyefoundation.com. Onsite ticket sales at event based upon availability.**

Bring the gift of sight to those in need by supporting VisionFestMN!

MINNESOTA EYE FOUNDATION

Peripheral Perils: A Comprehensive Guide to Peripheral Retinal Pathologies

COPE Course #:
Synchronous LIVE- 104171-TD
Synchronous Virtual- 104172-TD

Hossein K. Nazari, MD, Ph.D.

Hossein K. Nazari, MD, Ph.D.
Minnesota Retina Associates
Vitreoretinal surgeon

Course Description

This course provides a comprehensive guide to navigating the retinal periphery. Attendees will learn to differentiate benign degenerations from surgical emergencies through a comparative analysis of ultra-widefield imaging, optical coherence tomography, and dynamic scleral depression.

Course Objective

1. Differentiate Benign vs. Pathologic Lesions: Participants will demonstrate the ability to distinguish non-threatening peripheral findings, such as pavingstone degeneration, from high-risk pathologies like symptomatic horseshoe tears and subclinical detachments.
2. Optimize Imaging and Diagnostic Portfolios: Learning to leverage ultra-widefield technology as a screening tool while recognizing the clinical scenarios where dynamic scleral depression remains the mandatory gold standard for definitive diagnosis.
3. Clinical Case scenarios: Demonstrating some of the recent real-life examples of how a timely referral resulted in timely management and preservation of vision, and how missed cases or delayed presentations lead to long-term vision loss.

Peripheral Perils:
A Comprehensive Guide to Peripheral Retinal Pathologies

Hossein K. Nazari, MD, Ph.D.

1. Financial Disclosures
2. Introduction:
    a. Importance of peripheral retinal evaluation in clinical practice
    b. Role of the optometrist in early detection and referral
    c. Clinical goal:
        i. improving the “referral reflex”
3. Classification of Peripheral Retinal Findings:
    a. Benign Peripheral Findings -"Look-Alikes"
        i. Pavingstone degeneration
            1. No risk for RD; do not refer
        ii. Congenital Hypertrophy of the Retinal Pigment Epithelium (CHRPE)
            1. Benign, but monitor for enlargement
    b. Monitorable Findings - “Yellow Light”:
        i. Asymptomatic lattice degeneration
            1. Educate patients on flashes/floaters
        ii. Asymptomatic atrophic retinal holes
    c. High-Risk Findings - “Red Light”:
        i. Symptomatic Horseshoe Tears
        ii. Subclinical Retinal Detachment
        iii. Vitreous Hemorrhage with obscured periphery

4. Diagnostic Approaches to the Peripheral Retina:
    a. Ultra-Widefield Imaging
        i. Advantages:
            1. Documentation
            2. Patient education
            3. Screening
                a. Non-dilators
                b. It captures up to 200 degrees of the retina in a shingle shot
        ii. Limitations:
            1. Peripheral Distortion
            2. Eyelash Artifacts
            3. Static 2D representation of a 3D dynamic space
        iii. Clinical Pearl:
            1. Use UWF as your map, but not your final destination for symptomatic patients

b. “The Gold Standard”- BIO with Scleral Depression
i. Pros:
1. Allows for dynamic visualization
2. It brings the ora serrata into view and you can see the “flap” of a horseshoe tear lift
a. Something a 2D photo often misses
ii. When it’s Mandatory:
iii. Symptomatic patients
1. New onset flashes and floaters
2. Posterior vitreous detachment symptoms
3. Vitreous hemorrhage of unknown origin
iv. High-risk asymptomatic patients
1. High myopia
2. Family history of retinal detachment

5. Clinical Management and Referral Guidelines:
a. Monitoring Strategies
i. Asymptomatic lattice degeneration
ii. Use of UWF imaging for follow-up

b. In-Office Evaluation
i. Dilated examination protocols
ii. Use of scleral depression in symptomatic cases
c. Referral Decision Framework
i. When to monitor
ii. When to perform further evaluation
iii. When to refer to retina specialist

6. Top 5 Peripheral Red Flags-When to Refer:
a. The “Shafer Sign” (Tobacco Dust):
i. Pigment cells in the anterior vitreous are highly predictive of retinal tear ($>90\%$ correlation in some studies).
1. Action:
a. Urgent (24-48h) referral even if the retina “looks” flat on Optos
b. Symptomatic Horseshoe Tears (HST):
i. Unlike atrophic holes, HSTs have active vitreoretinal traction
ii. Flashes and new floaters indicate the “flap” is being pulled
1. Action:
a. Same-day or Next-day referral for prophylactic laser retinopexy

c. Subclinical Retinal Detachment:
i. Fluid extending >1 disc diameter from a break, even if the patient is asymptomatic
1. Action:
a. Urgent referral, these can progress to involving the macula rapidly

d. Vitreous Hemorrhage (VH) of Unknown Origin:
- i. If you see “heme” but cannot see the source in the periphery, assume a tear until proven otherwise
  1. Action:
     a. Urgent referral for B-Scan and depressed exam

e. Localized “Lattice” with Superior Fluid:
- i. Lattice in the superior quadrants is statistically more likely to lead to a “Mac-Off” detachment due to gravity- assisted fluid progression
  1. Action:
     a. Prompt referral for evaluation

7. Case-Based Clinical Pearls:
   a. Correlating symptoms with clinical findings
   b. Limitations of imaging alone in symptomatic patients
   c. Importance of clinical judgment over imaging results
   d. “When in doubt, refer” principle

8. Overview/Questions?

Notes:

Oculoplastics Update: Old Dog, New Tricks

Jill S. Melicher, MD

Jill S. Melicher, MD
Minnesota Eye Consultants
Oculofacial & Plastic Surgery

COPE Course #:
Synchronous LIVE: 104588-TD
Synchronous Virtual: 104589-TD

Course Description

This course provides an overview of periocular anatomy, common eyelid and orbital conditions, and current therapeutic approaches. Emphasis is placed on pharmacologic treatments, patient selection, and complication management. Case-based discussions enhance clinical decision- making and support optometrists in identifying, managing, and appropriately referring periocular disease.

Course Objective

1. We will discuss key periocular and orbital anatomy relevant to clinical care.
2. Identify indications for common periocular therapeutic interventions.
3. We will discuss how to recognize and manage complications of periocular treatments.

Oculoplastics Update: Old Dog, New Tricks

Jill S. Melicher, MD

1. ***Financial Disclosures***
2. ***Relevant Clinical Periocular and Orbital Anatomy:***
    a. Skin and muscular periocular anatomy
        i. Eyelid layers and function (anterior vs. posterior lamella) ii. Orbicularis oculi and levator function in eyelid positioning
    b. Periocular compartments
        i. Preseptal vs. postseptal anatomy
        ii. Clinical relevance in infection and inflammation
    c. Vascular anatomy and clinical relevance
        i. Arterial supply and venous drainage
        ii. Risk of vascular compromise with injections or procedures
    d. Neural anatomy of the periocular region
        i. Sensory innervation (trigeminal nerve branches)
        ii. Motor innervation and functional implications
    e. Orbital compartments and structures
        i. Extraocular muscles and connective tissue
        ii. Lacrimal system and adnexal structures
        iii. Clinical correlation to disease processes

3. ***Principles of Periocular Therapy:***
    a. Risk assessment and contraindications
        i. Patient comorbidities and systemic considerations
        ii. Medication interactions and precautions
    b. Informed consent and patient counseling
        i. Setting expectations for outcomes
        ii. Discussion of risks, benefits, and alternatives
    c. Individualized treatment planning
        i. Tailoring therapy to diagnosis and severity
        ii. Indications for referral to subspecialty care

4. ***Pharmacologic Management of Periocular Disease:***
    a. Anti-inflammatory Agents:
        i. Mechanism of action
        ii. Clinical indications
            1. Blepharitis
            2. Chalazion
            3. Inflammatory conditions

iii. Treatment paradigms
1. Topical
2. Oral
3. Injectable
iv. Evidence-based outcomes and efficacy
v. Risks and complications
1. IOP elevation
2. Skin changes

b. Neuromodulators:

i. Mechanism of action
1. Neuromuscular blockade
ii. Indications in periocular conditions
1. Blepharospasm
2. Spastic disorders
iii. Treatment protocols and dosing considerations
iv. Outcomes and clinical efficacy
v. Risks and complications
1. Ptosis
2. Asymmetry
3. Diffusion effects

c. Antimicrobial Agents:

i. Mechanism of action
1. Bacterial coverage and resistance considerations
ii. Indications for use
1. Canaliculitis, preseptal cellulitis
iii. Treatment strategies
1. Topical vs. systemic therapy
iv. Evidence and outcomes
v. Risks and complications
1. Resistance
2. Allergy

d. Sclerosing Therapies:

i. Relevant anatomy considerations
ii. Clinical indications
1. Vascular and lymphatic malformations
iii. Treatment approach and technique considerations
iv. Outcomes and supporting evidence
v. Risks and complications
1. Tissue necrosis
2. Inflammation

5. Emerging Therapies in Oculoplastics:

- a. Overview of new and evolving treatments
- b. Mechanisms and indications
- c. Clinical considerations, limitations and patient selection
- d. Future directions in periocular therapeutics

6. Complication Recognition and Management:

- a. Immediate complications
  - i. Injection related complications
- b. Delayed complications
  - i. Infection ii.
    Scarring
  - iii. Functional and cosmetic concerns
- c. Identification of emergency situations
  - i. Orbital cellulitis vs. preseptal cellulitis
- d. Management strategies and referral consideration

7. Case-Based Clinical Applications:

- a. Chalazion
- b. Atypical eyelid spasm
- c. Canaliculitis
- d. Venolymphatic malformation
- e. Clinical decision-making and management strategies

8. Conclusion:

- a. Importance of detailed anatomical knowledge for safety
- b. Individualized treatment planning
- c. Role of multidisciplinary collaboration
- d. Preparedness in complication recognition and management

Notes:

SESSION TWO

Thomas Samuelson, MD

Minnesota Eye Consultants
Glaucoma, Cataracts & LASIK

Patrick Reidel, MD

Minnesota Eye Consultants
Glaucoma, Cataracts & LASIK

Clara Choo, MD

Minnesota Eye Consultants
Cataracts & Glaucoma

Christine Larsen, MD

Minnesota Eye Consultants
Glaucoma & Cataracts

Chase Liaboe, MD

Minnesota Eye Consultants
Cataracts & Glaucoma

Ahmad Fahmy, OD, FAAO

Minnesota Eye Consultants
Dry Eye Specialist, Primary Eye Care

Mark Buboltz, OD, FAAO

Minnesota Eye Consultants
Primary Eye Care, Specialty Contact Lenses, and Dry Eye Specialist

The Paradigm Shift of Interventional Glaucoma

COPE Course ID #
Synchronous-LIVE: 97615-TD
Synchronous-Virtual: 97617-TD

Course Description

We will discuss how glaucoma management is evolving from a medication-dependent model toward earlier use of procedural and interventional therapies. This course will review current treatment paradigms including selective laser trabeculoplasty (SLT), sustained-release drug delivery systems, minimally invasive glaucoma surgery (MIGS), and traditional surgical options. Attendees will learn how these therapies may improve adherence, reduce ocular surface toxicity, and optimize long-term patient outcomes through collaborative glaucoma care.

Course Objective

1. We will discuss the limitations of chronic topical glaucoma therapy, including adherence, ocular surface disease, and treatment burden.
2. Identify the role of SLT as an early or first-line treatment option in open-angle glaucoma management.
3. Recognize emerging sustained-release medication delivery systems and their clinical applications.
4. Apply current treatment strategies to improve patient counseling, referral timing, and co-management outcomes.

The Changing Landscape of Interventional Glaucoma

Thomas Samuelson, MD

1. Financial Disclosures

2. Evolution of Glaucoma Management

a. Historical reliance on topical medications
b. Transition toward procedural and interventional care
c. Drivers of paradigm shift in glaucoma treatment

3. Limitations of Topical Medication Therapy

a. Medication adherence and patient compliance challenges
b. Difficulty maintaining 24/7 and nocturnal IOP control
c. Ocular surface toxicity and histopathologic damage from chronic drops
d. Reduced efficacy with multiple medication additions
e. Quality-of-life burden of complex regimen

4. Benefits of Reducing Drop Dependence

a. Removal of treatment burden from patient self-administration
b. Sustained around-the-clock therapy options
c. Potential for improved disease control
d. Improved comfort and ocular surface health
e. Better long-term patient satisfaction

5. First-Line Interventional Therapy: Laser Trabeculoplasty

a. Role of SLT in newly diagnosed open-angle glaucoma
b. Comparison of SLT versus initial eyedrop therapy
c. Evidence supporting earlier laser intervention
d. Patient selection for laser treatment
e. Discussion of direct selective laser trabeculoplasty (DSLT)

6. Sustained-Release Drug Delivery Options

a. Rationale for depot medication therapy
b. Intracameral bimatoprost implant
c. Intracameral travoprost implant
d. Benefits in adherence and reduced dosing burden
e. Clinical indications and limitations

7. Case-Based Review: Medication Intolerance

a. Elderly patient referred due to eyedrop side effects
b. Ocular surface findings from chronic drop therapy
c. Consideration of sequential SLT and intracameral therapy
d. Reduction of medication burden through interventional management

8. Minimally Invasive Glaucoma Surgery (MIGS)

a. Role of MIGS in treatment algorithm
b. Canal-based procedures
    i. iStent Infinite
    ii. Hydrus
    iii. OMNI / iTrack / Via360
c. Advantages and limitations of MIGS
d. Appropriate referral timing for surgical consultation

9. Traditional and Advanced Surgical Management

a. Indications for more aggressive intervention
b. Xen gel stent
c. Trabeculectomy
d. Tube shunt procedures
e. Controlled cyclodialysis with scleral reinforcement
f. Role in advanced or refractory disease

10. Establishing a Modern Glaucoma Treatment Paradigm

a. SLT as first-line therapy
b. Sustained-release drug delivery as second-line option
c. MIGS for progressive disease requiring procedural escalation
d. Traditional surgery for advanced glaucoma
e. Reserving multi-drop regimens when minimally invasive options exhausted

11. Optometric Co-Management Considerations

a. Identifying candidates for referral
b. Monitoring post-procedural outcomes
c. Reinforcing adherence and follow-up care
d. Communicating treatment expectations with patients

12. Summary and Q&A

a. Key clinical takeaways
b. Future trends in interventional glaucoma
c. Audience questions and discussion

Selective Laser Trabeculoplasty

Patrick J. Riedel, MD

1. SLT
    a. How it works
    b. Risks and benefits
    c. What the patient can expect d. How to follow the patient
    e. Studies:
        i. LiGHT
        ii. SALT
        iii. COAST
        iv. GLAUrious
2. SLT (DSLT) in glaucoma treatment algorithms
    a. Where do these lasers fit in the algorithm? b. Miscellaneous
3. Overview/Questions?

Updates in Minimally Invasive Glaucoma Surgeries – Part 1 (Trabecular Meshwork and Suprachoroidal Pathways)

Clara Choo, MD

1. Financial Disclosures
2. Principles of Minimally Invasive Glaucoma Surgery
    a. Tissue sparing, preservation of anatomy
    b. High safety profile, quick visual recovery, reduction of drop burden
    c. Evidence of long-term efficacy
        i. Clinical trials
        ii. Case series
3. Evolution of MIGS
    a. Mild to moderate glaucoma disease
        i. Controlled severe disease
    b. Open angle glaucoma
        i. Narrow angle glaucoma
    c. Combination of cataract surgery
        i. Standalone MIGS surgery without cataract removal
4. Patient selection
    a. Severity of eye disease
    b. Goals of the surgery:
        i. Controlled vs. uncontrolled disease
        ii. Decreasing drop burden
        iii. Target IOP
    c. Patient's ability to cooperate during the surgery to achieve a safe outcome and avoiding unnecessary tissue damage for future surgeries
    d. Patient's ability to stay off blood thinners
    e. Patient's expectation for future glaucoma surgeries

5. Conventional vs. unconventional Pathway
    a. Conventional Outflow (85%): Trabecular Meshwork/Schlemm's Canal
    b. Unconventional Outflow (15%): Across the iris root into the ciliary muscle, supraciliary and suprachoroidal space
        i. Driven by the pressure gradient through the uvea, movement of the ciliary muscle and cytoskeletal changes
        ii. Decreases every night, mirroring decreased aqueous production at night
        iii. Reduced with aging, OHTN and PXE
        iv. Increased with uveitis
6. Existing MIGS:
    a. Conventional Pathway
        i. Stents:
            1. iStent (1st generation, 2nd generation – iStent inject, 3rd generation – iStent infinite)
            2. Hydrus
        ii. Goniotomy/Removal of TM tissue
            1. KDB Glide
            2. Streamline Surgical System
            3. TrabEx
        iii. Canal based surgeries
            1. OMNI
            2. Via360
            3. Ab-Interno Canaloplasty with iTrack catheter
    b. Unconventional Pathway
        i. AlloFlo Uveo
            1. Scleral allograft-reinforced cyclodialysis (1-2 clock hours)
            2. 500 microns width X 5 mm in length
            3. Available for clinical use

7. MIGS Pipeline: Conventional Pathway

a. EyeFlow Stent:

i. Early clinical trials

ii. 10 mm long, tapered ends, back scaffolding open

iii. Optional reservoir attachment – prostaglandin release over 12 months

b. Elios Excimer Laser:

i. Phase 3 clinical trial

ii. Ten 210 micron channels in the TM

c. FLIGHT: Femtosecond laser image guided high precision trabeculotomy

i. Phase 1 clinical trial completed 2025

ii. Both a live and OCT view of the trabeculotomy channels created

iii. Done in a laser suite much like LASIK

d. PICOLUMEN:

i. Phase 1 clinical trial completed 2025

ii. Low energy pico-green laser used to create 8 360° channels

8. MIGS Pipeline: Unconventional Pathway

a. MINIject

i. Porous silicone material, 5 mm long, inserted into supraciliary space

ii. Prospective multicenter masked trial to be completed by 2027-2029

b. Intercil

i. 6 mm X 4 mm X 0.6 mm thick

ii. Under sclera, above the ciliary body to enhance suprachoroidal filtrations

iii. Early phase studies

9. Questions?

MIBS (vs. MIGS): Choosing the Right Intervention for the Right Patient

Christine Larsen, MD

1. Financial Disclosures
2. Introduction: Evolution of Glaucoma Surgical Management
   a. Historical approach to glaucoma treatment:
      i. Stepwise escalation from medications and SLT to trabeculectomy or tube shunts
      ii. Limited intermediate options, resulting in a significant jump in surgical risk
   b. Expansion of the surgical spectrum:
      i. Introduction of MIGS (minimally invasive glaucoma surgery)
      ii. Emergence of MIBS (minimally invasive bleb surgery)
   c. Conceptual shift in glaucoma care:
      i. Moving from a binary treatment model to a spectrum of interventions
      ii. Increasing ability to match surgical risk to disease severity
   d. Importance of timing:
      i. Not only what procedure is performed, but when intervention occurs
3. MIGS vs. MIBS: Mechanisms and Clinical Implications:
   a. MIGS:
      i. Typically, ab interno procedures
      ii. Enhance physiologic outflow via trabecular or Schlemm's canal pathways
      iii. Limited by episcleral venous pressure
      iv. Modest IOP reduction with high safety profile
   b. MIBS:
      i. Subconjunctival filtration via microshunts
      ii. Can be performed ab interno or ab externo
      iii. Greater IOP-lowering potential compared to MIGS
      iv. More controlled and standardized than traditional trabeculectomy
   c. Key distinctions:
      i. Presence of a bleb
      ii. Expected IOP outcomes
      iii. Differences in post-operative management and risk profile

4. Clinical Decision-Making Framework:
    a. Importance of individualized patient assessment
    b. Key considerations:
        i. Disease stage and type of glaucoma
        ii. Target intraocular pressure
        iii. Evidence of progression despite therapy
    c. Additional patient-specific factors:
        i. Lens status (phakic vs. pseudophakic)
        ii. Medication tolerance and adherence
        iii. Age and life expectancy
        iv. Conjunctival health and prior surgery
    d. Remaining non-surgical options:
        i. SLT
        ii. Sustained drug delivery
    e. Core principle:
        i. Surgical intervention should be proportional to disease risk
5. Patient Selection: When MIGS is Appropriate
    a. Ideal candidates:
        i. Mild to moderate glaucoma
        ii. Target IOP in the mid-to-high teens
        iii. Patients undergoing cataract surgery
        iv. Medication intolerance or adherence challenges
        v. Healthy angle anatomy
    b. Limitations of MIGS:
        i. Advanced glaucoma
        ii. Low target IOP requirements (<12 mmHg)
        iii. Progression despite low-teens IOP
        iv. Prior failed angle-based procedures
    c. Clinical takeaway:
        i. MIGS prioritizes safety but may not achieve sufficiently low pressures in more advanced disease
6. Patient Selection: When to Consider MIBS
    a. The clinical gap:
        i. Patients too advanced for MIGS but not ideal candidates for trabeculectomy or tube shunts
    b. Ideal candidates:
        i. Moderate to advanced glaucoma
        ii. Failed prior canal-based surgery
        iii. Need for lower target IOP
        iv. Patients with preserved visual field reserve
    c. Advantages of MIBS:
        i. Greater IOP reduction compared to MIGS
        ii. Lower hypotony risk compared to trabeculectomy
        iii. More predictable post-operative course
    d. Emphasis on timing:
        i. Considering MIBS before disease progression necessitates higher-risk surgery

7. Current and Emerging MIBS Technologies:
   a. XEN Gel Stent:
      i. Currently the only FDA-approved MIBS option in the U.S.
      ii. Gelatin stent with 45 μm lumen designed to regulate flow
      iii. Demonstrated IOP reduction to low–mid teens with medication reduction
   b. XEN63:
      i. Larger lumen designed for greater IOP lowering
      ii. Under investigation in refractory glaucoma (MEC is trial site)
   c. PRESERFLO MicroShunt (outside U.S.):
      i. Ab externo approach with greater IOP reduction
   d. Emerging technologies:
      i. VisiPlate, Aqualumen, and microsclerostomy techniques
      ii. Focus on improving consistency and safety of subconjunctival outflow
8. Post-Operative Management and Co-Management Considerations:
   a. Expected post-operative course:
      i. Presence of a low, diffuse bleb
      ii. Early IOP fluctuations
      iii. Discontinuation of glaucoma medications initially
   b. Role of adjunctive interventions:
      i. Needling as routine optimization (not failure)
      ii. Possible YAG laser to the stent ostium
   c. Steroid management:
      i. Gradual taper based on bleb appearance and IOP
   d. When to refer back to the surgeon:
      i. Rising IOP
      ii. Bleb flattening or abnormal morphology
      iii. Consideration of restarting medications
   e. Key co-management message:
      i. Early communication and referral are preferred over escalation of topical therapy
9. Lessons Learned and Practical Takeaways:
   a. Not all mild glaucoma represents low risk
   b. Progression rate, medication tolerance, and life expectancy are critical factors
   c. Durability and safety exist along a continuum
   d. Earlier intervention may allow safer and more effective long-term outcomes
   e. Avoiding chronic hypotony is an important goal in modern glaucoma surgery
   f. Expanded surgical options enable:
      i. Better risk mitigation
      ii. More individualized patient care
      iii. Improved long-term visual outcomes
10. Summary and Key Takeaways:
   a. Patient selection is central to successful glaucoma management
   b. MIGS and MIBS provide complementary roles within the treatment spectrum
   c. Surgical choice should align with disease severity and target IOP
   d. Co-management plays a critical role in optimizing outcomes
   e. Advances in technology allow for safer, earlier, and more tailored intervention

Ocular Surface Disease and MIGS Optimizing Glaucoma Outcomes

Ahmad Fahmy, OD, FAAO

1. ***Financial Disclosures***
2. ***Ocular Surface Disease in Glaucoma Care***
   a. Prevalence of OSD in glaucoma patients
   b. Relationship between glaucoma medications and surface disease
   c. Impact of preservatives and chronic drop exposure
   d. Importance of recognizing concurrent glaucoma and OSD
3. ***Clinical Burden of OSD***
   a. Dryness, burning, stinging, irritation, fluctuating vision
   b. Meibomian gland dysfunction and tear film instability
   c. Reduced patient comfort and treatment satisfaction
   d. Impact on medication adherence and long-term care
4. ***Structural Assessment and Diagnostic Imaging***
   a. Evaluation of meibomian gland structure
   b. Corneal and tear film assessment
   c. Optic nerve imaging in glaucoma monitoring
   d. Integrating ocular surface and glaucoma diagnostics
5. ***Inflammation and Ocular Surface Damage***
   a. Chronic inflammation associated with untreated OSD
   b. Surface epithelial compromise
   c. Corneal nerve dysfunction and altered sensation
   d. Neurotrophic and neuropathic ocular pain considerations
6. ***Preservative Load as a Modifiable Risk Factor***
   a. Benzalkonium chloride and preservative toxicity concepts
   b. Surface inflammation from long-term drop exposure
   c. Benefits of reducing preservative burden
   d. Medication selection considerations
7. ***MIGS and Ocular Surface Preservation***
   a. Role of MIGS in reducing medication dependence
   b. MIGS as balance of IOP lowering and surface preservation
   c. Comparison with bleb-forming procedures
   d. When MIGS may improve quality of life

8. ***Review of Interventional Options***
    a. Selective laser trabeculoplasty (SLT)
    b. iStent technologies
    c. Hydrus Microstent
    d. Xen Gel Stent
9. ***Aqueous Outflow and Procedure Selection***
    a. Concept of aqueous angiography
    b. Restoration of outflow pathways with trabecular procedures
    c. Matching procedure choice to glaucoma severity
    d. Matching procedure choice to ocular surface severity
10. ***Treatment Decision Framework***
    a. Target IOP goals
    b. Ocular surface risk level
    c. Adverse effect profile
    d. Convenience and adherence factors
    e. Prior authorization / access barriers
    f. Patient-centered shared decision making
11. ***Defining the Well-Controlled Glaucoma Patient***
    a. Stable structural testing & functional testing
    b. Minimal ocular surface inflammation
    c. Sustainable long-term treatment plan
12. ***Summary and Q&A***

Glaucoma Referral Urgency & Co-Management

Mark Buboltz, OD, FAAO

1. Financial Disclosures
2. The Ophthalmologist–Integrated Optometrist–Referring Optometrist Partnership
    a. Roles within collaborative glaucoma management
    b. Benefits of integrated referral systems
    c. Improving communication between providers
    d. Supporting efficient and effective patient care transitions
3. Same-Day Referral Indications
    a. Open-angle glaucoma emergencies
        i. Very high intraocular pressure
        ii. Severe or rapidly progressive disease
        iii. Determining whether therapy has been initiated
        iv. Initiating treatment prior to referral when appropriate
    b. Acute angle closure glaucoma
        i. Ocular pain
        ii. Nausea and vomiting
        iii. Corneal edema
        iv. Mid-dilated pupil findings
    c. Clinical urgency and risk of permanent vision loss
    d. Importance of timely referral coordination
4. Urgent Referral Indications
    a. Moderate-to-severe glaucoma disease
    b. Functional monocular patients
    c. Elevated IOP despite maximum tolerated medical therapy
    d. Neovascular glaucoma
        i. Iris neovascularization
        ii. Angle neovascularization findings on gonioscopy
        iii. Coordinated glaucoma and retina referral
    e. Patient counseling regarding urgency and compliance
    f. Preventing progression through timely intervention
5. Referral Communication and Management Pearls
    a. Effective provider communication strategies
        i. Phone communication
        ii. Electronic messaging
        iii. Fax communication
    b. Initiating or adjusting therapy prior to referral
    c. Defining ownership of patient care during transition
    d. Importance of documentation and urgency designation

6. Routine / Next-Available Referral Considerations
    a. Slowly progressive glaucoma cases
    b. Glaucoma suspect evaluations and work-up
    c. Determining referral destination
        i. Integrated optometrist consultation
        ii. Ophthalmology procedural or surgical consultation
    d. Medication intolerance and compliance concerns
    e. Referral for interventional glaucoma procedures
        i. Selective laser trabeculoplasty (SLT)
        ii. Minimally invasive glaucoma surgery (MIGS)
7. Co-Management Pearls
    a. Establishing a clear referral reason
    b. Communicating urgency level
    c. Key clinical information to include with referral
        i. Recent intraocular pressure measurements
        ii. Tmax history
        iii. Current medications
        iv. OCT findings
        v. Humphrey visual field results
    d. Establishing long-term follow-up preferences
    e. Transitioning patients back to referring provider after stabilization
8. Post-Operative MIGS Considerations
    a. Expected medication reduction timeline
    b. Angle-based MIGS procedures
    c. Expected post-operative hyphema findings
    d. Gonioscopy evaluation of stent positioning
    e. Monitoring during the early post-operative period
    f. Recognizing steroid response and inflammatory complications
    g. Managing IOP fluctuations after surgery
9. Patient Education and Counseling
    a. Educating patients on procedure goals and expectations
    b. Counseling regarding continued medication use after SLT or MIGS
    c. Expected timeline for procedural effectiveness
    d. Reinforcing the importance of ongoing glaucoma care
    e. Improving patient compliance and follow-up adherence
10. Questions?

Notes:

SESSION TWO

Confident Conversations: Patient Education Skills That Elevate Your Practice

Troy Cole
Catalyst-in-Chief
LogiCole Consulting, LLC

COPE Course ID #
Synchronous-LIVE: 103741-GO
Synchronous-Virtual: 103742-GO

Course Description

Explore how proactive patient education enhances cataract co-management. This course reviews practical communication strategies for introducing intraocular lens options prior to referral, supporting the optometrist's role in collaborative surgical care and improving patient understanding and outcomes.

Course Objective

1. **Implement proactive communication strategies to educate patients about premium lens options before surgical referral.**
2. **Apply collaborative care principles that enhance the OD-MD partnership and improve patient outcomes.**
3. **Develop confidence in presenting advanced cataract technology options across diverse patient populations.**

Confident Conversations: Patient Education Skills That Elevate Your Practice

Troy Cole, Catalyst-in-Chief

1. Financial Disclosures
2. Introduction: The Evolution of Collaborative Cataract Care:
    a. The changing landscape of OD-MD relationships
        i. Review of the historical relationship between optometrists (ODs) and ophthalmologists (MDs) in cataract care
        ii. Discussion of how advancements in surgical technology and patient expectations have shifted the co-management model
    b. Why proactive beats reactive in patient education
        i. Explanation of why proactive patient education is more effective than reactive conversations after referral
    c. What attendees will gain from this session
        i. Overview of the goals of the session, including enhancing communication strategies and improving patient outcomes through collaboration
3. Mindset Shift: Elevate Your Role in the Patient Journey:
    a. You're not "just referring", you're guiding
        i. Reframing the role of the optometrist from "referrer" to integral guide in the surgical journey
    b. The OD as trusted advisor and educator
        i. Emphasizing the optometrist's position as a trusted advisor who helps shape patient expectations and understanding
    c. ODs and MDs
        i. How you are each experts in their respective fields
        ii. Strategies for reinforcing a unified message to patients
4. The Case for Proactive Education:
    a. What happens when the patients arrive uneducated vs. prepared
    b. The referral experience from the patient's perspective
        i. Review of how pre-education can reduce anxiety and improve the efficiency of surgical consultations
    c. Impact on surgical outcomes and patient satisfaction
    d. Benefits to your practice, the surgical practice and the patient i.
    The patient (improved understanding and confidence)
        ii. The optometric practice (enhanced trust and continuity of care)
        iii. The surgical practice (more efficient consultations and better alignment of expectations)

5. What to communicate: Premium Lens Technology Essentials:
    a. Key talking points Optometrists should cover
    b. How much detail is enough and not too much
        i. Discussion of essential talking points optometrists should address prior to referral
    c. Addressing "money questions" with confidence
        i. Strategies for discussing cost considerations in a clear, ethical, and patient-centered manner
    d. Common patient questions and effective responses
        i. Effective, unbiased responses that support informed decision-making
    e. Techniques for tailoring communication based on patient lifestyle, visual needs, and expectations
6. How to Communicate: Practical Frameworks and Scripts:
    a. The collaborative care conversation framework
    b. Natural integration into existing exam workflows
        i. Methods for incorporating patient education seamlessly into existing exam workflows without significantly increasing chair time
    c. Language that builds trust without overselling
        i. Use of clear, neutral language that builds trust and avoids the perception of sales-driven communication
    d. When and how to introduce premium options in the exam
        i. Guidance on appropriate timing for introducing surgical options and premium lens technologies
7. Interactive Application:
    a. **Audience participation/movement activity
        i. Engagement of participants through audience participation activities designed to reinforce key concepts
    b. Real-world scenarios and role-play opportunities
        i. Opportunities for role-play exercises to practice patient conversations in a structured environment
    c. Audience Q&A using polling technology
        i. Use of polling or interactive technology to gather audience input and encourage discussion
        ii. Facilitated question-and-answer session to address participant-specific challenges and scenarios

8. Conclusion: Taking it Beyond Cataracts:
    a. Discussion of how the principles of proactive education and communication can be applied to other areas of optometric practice, including refractive services, optical recommendations, and dry eye management
    b. Strategies for building a culture of proactive patient education within the practice
    c. Building a proactive education culture in your practice
        i. Identification of actionable next steps for implementation in clinical settings
    d. Next steps and key takeaways
        i. Encouragement for continued learning and refinement of communication strategies to enhance patient outcomes.
9. Q&A

Notes:

SESSION TWO

Instructor:

Mark S. Hansen, MD

Minnesota Eye Consultants
Cornea, Cataracts, Glaucoma, LASIK

Co-Instructors:

David Hardten, MD, FACS

Minnesota Eye Consultants
Cornea, Cataracts, LASIK

Sherman W. Reeves, MD, MPH

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Modern Cataract Care: A Collaborative Case Panel

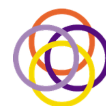
COPE Course ID #:
Synchronous LIVE- 104591-PO
Synchronous Virtual- 104592-PO

<u>Course Description</u>

This case-based panel reviews contemporary cataract management through complex clinical scenarios, including refractive goals, ocular surface disease, and post-refractive surgery patients. Emphasis is placed on pre-operative assessment, IOL selection, and post-operative management strategies to optimize outcomes through collaborative optometric and surgical care.

<u>Course Objective</u>

1. Identify key pre-operative considerations impacting cataract surgical planning.
2. Compare IOL options based on patient-specific factors and ocular comorbidities.
3. Apply strategies for managing post-operative refractive outcomes and complications.
4. Develop collaborative approaches to improve patient counseling and co-management.



Modern Cataract Care: A Collaborative Case Panel

Instructor Name:

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Co-Instructors:

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1. Financial Disclosures

2. Case 1: Cataract Patient Seeking Spectacle Independence

a. Patient Presentation: 62-year-old female
  i. Symptoms:
    1. night driving halos
  ii. Clinical findings:
    1. BCVA 20/30 OU, BAT 20/60 OU, 1+ PSC OU

b. Patient Goals and Expectations:
  i. Desire for distance and near spectacle independence
  ii. Audience response: initial management approach

c. Pre-operative Considerations:
  i. History of refractive surgery
  ii. Prior monovision or visual strategies
  iii. Patient lifestyle and expectations

d. Diagnostic Evaluation:
  i. Corneal topography and tomography
  ii. Biometry and IOL calculations

e. Patient Counseling:
  i. Limitations of IOL power accuracy
  ii. Risk of over/under correction
  iii. Setting realistic expectations

f. IOL Selection and Counseling:
  i. Standard vs. premium IOLs
  ii. Multifocal, EDOF, and toric options
  iii. Risks, benefits, and trade-offs

g. Post-operative Management:
  i. Residual refractive error management
  ii. Enhancement strategies
    1. Laser vision correction
    2. Lens-based options

h. Panel Discussion:
  i. Expert perspectives on IOL selection and surgical approach

3. Case 2: Cataract with Concurrent Corneal Disease:

a. Patient Presentation: 66-year-old male
- i. Symptoms:
  1. Blurred vision
  2. Ocular irritation
- ii. Clinical Findings:
  1. BCVA 20/50, +3 NS, pterygia OU

b. Clinical Decision-Making:
- i. Audience response questions:
  1. Prioritization of treatment

c. Pre-operative Considerations:
- i. Ocular surface disease
  1. Dry eye
  2. Blepharitis
- ii. Environmental factors
  1. UV Exposure
  2. Wind
  3. Dust

d. Diagnostic Evaluation:
- i. Corneal topography/tomography
- ii. Tear film and ocular surface assessment

e. Surgical Planning and IOL Considerations:
- i. Cataract surgery alone vs. staged procedures
- ii. Timing of pterygium excision
- iii. IOL selection in irregular corneas

f. Post-operative Management:
- i. Management of residual astigmatism
- ii. Ocular surface optimization

g. Panel Discussion:
- i. Treatment sequencing and outcome optimization
  - i. Treatment sequencing and outcome optimization

4. Case 3: Cataract in a Post-LASIK Patient

a. Patient Presentation: 58-year-old female with prior LASIK

i. Symptoms:

1. Night driving halos

ii. Clinical findings:

1. BCVA 20/25, BAT 20/50 OU, 1+ PSC OU

b. Pre-operative Considerations:

i. Importance of prior refractive data

ii. History of monovision

iii. Patient expectations for spectacle independence

c. Diagnostic Evaluation:

i. Corneal topography/tomography

ii. Post-refractive surgery IOL calculations

d. Patient Counseling:

i. Limitations of IOL power accuracy

ii. Risk of over/under correction

iii. Setting realistic expectations

e. IOL selection:

i. Standard vs. premium IOLs

ii. Considerations in altered corneal biomechanics

f. Post-operative Management:

i. Residual refractive error management

ii. Enhancement strategies

g. Panel Discussion:

i. Best practices in post-refractive cataract care

5. Interactive Panel Q&A

a. Open discussion on complex cataract scenarios

b. Audience-driven case questions

c. Clinical pearls for co-management and referral communication

Notes:

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QUESTIONS FOR THE SPEAKER?

SCAN BELOW