

The Tried, The True, & The New in Ocular Surface Disease

2 hours

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Description:

Participants will learn of diagnostic methodologies and treatment options for ocular surface diseases and in particular dry eye disease, blepharitis, and meibomian gland dysfunction. Ocular surface disease is the most common medical condition optometry faces impacting contact lens drop-out, spectacle remakes, cataract outcomes and patient retention. This esteemed panel will provide updates on what still works, what is new and what has been replaced in our understanding and management of ocular surface diseases.

Learning Objectives:

Receive an overview of the latest developments in OSD
Better understand recent diagnostic advances and simplified effective protocols
Learn of the newest treatments available for various ocular surface diseases
Gain familiarity with recently approved pharmaceuticals
Familiarize yourself with an effective algorithm for each subtype of dry eye disease
Discover how to position your practice to help the 40+ million people suffering with dry eye and ocular surface disease

- I. Epidemiology
- II. Predisposing factors
 - A. Age
 - Increasing population trends
 - Digital Device use
 - B. Gender
 - C. Environment
 - D. Anterior segment disease
 - E. Medications
 - F. Systemic disease
 - G. Contact lens wear
 - H. Refractive surgery
- III. Environment
 - A. Air conditioning
 - B. Water Intake
 - C. Reading/Computer work etc.
 - D. Computer monitor height
 - E. Outdoors
 - F. Seasonality

- G. Allergies
- H. Blepharitis

I. Blepharitis/MGD and other lid conditions

- A. Blepharitis
 - i. Demodex identification
 - ii. Bacterial role?
- B. Meibomian Gland Dysfunction
- C. 70-80% of the cases of dry eye
- D. Diagnostic pearls to MGD
 - i. Do you express MG's and how?
 - ii. Inspissated glands – turbid on expression
 - iii. Capped glands
 - iv. Involuted or cicatricial glands
 - v. Signs on the eyelids
 - a. Telangiectasia
 - b. Misdirected lashes
 - c. Collarettes and demodex
 - d. Role of bacteria in blepharitis?
- E. Inadequate lid seal/Nocturnal exposure
 - vi. Identification on symptoms
 - vii. Findings
 - viii. Testing?
 - ix. Treatment

II. Lifestyle and Medications and their effect on OSD

- A. Lifestyle effects
 - iii. Make-up
 - iv. Lash extensions etc.
 - v. Cosmetic surgery including fillers etc.
- B. Topical
 - i. Glaucoma medications
- C. Systemic medications
 - i. Diuretics
 - ii. Antihistamines
 - iii. Hormone replacement therapy
 - iv. Isotretinoin
 - v. Anti-depressive medications
 - vi. Cholinergics

III. Systemic Disease

- A. Diabetes
 - i. Growing at 6% per year

- ii. Over 50% of DM patients have OSD
- B. Arthritis
- C. Sjogren's Disease
 - i. Diagnosis
 - ii. Therapies such as Salagen or Evoxac
 - iii. Role of lymphoma association
 - iv. New research understanding
- D. Thyroid Disease
- E. Rosacea
 - i. Diagnosis
 - ii. Key signs
 - iii. Role of oral doxycycline –low dose
 - iv. Role of light treatment
 - v. Future treatments

- IV. Refractive Surgery and Contact Lens Wear
 - A. Care schedule/disposable lenses etc.
 - i. Water content
 - ii. Daily disposables
 - iii. SiHy
 - B. Iatrogenic and surgery in dry eye
 - i. Cataract
 - ii. Refractive surgery/LASIK
 - iii. Retina, glaucoma and other surgeries

- VIII. Testing for DED - what's new, what's out?
 - A. Patient Questionnaire – samples given
 - B. Osmolarity and other POC testing
 - C. Eyelid examination
 - D. Tear Film Break Up Time (Tear FBUT) - invasive vs. non-invasive
 - E. Tear meniscus height
 - F. Staining
 - 1. NAFL
 - 2. Lissamine Green vs. Rose Bengal vs. filters
 - G. Other testing:
 - i. Schirmers
 - ii. Other new testing?

- IX. Treatment
 - A. Patient education
 - 1. Treating inflammation or treating the cause?
 - 2. Water intake and hydration drinks
 - 3. Systemic management

4. Lifestyle changes
 - i. Around digital device use
 - ii. Around makeup etc.
- B. Nutritional supplements**
1. New modalities
 2. Ointments vs. gels vs. tears
 3. Preserved vs. preservative free
 4. Nutritional supplements
 - Fish oil – DHA and EPA
 - Flaxseed
 - GLA
 - Omega fatty acid research
 - Key Vitamins
- C. New medications**
1. Neuromodulation
 - iii. External
 - iv. Intra-nasal
 - v. Topical
 2. Immunomodulators
 - vi. Cyclosporine 0.05%
 - vii. Cyclosporine 0.09%
 - viii. Cyclosporine 0.1% + PFBP
 - ix. Lifitegrast 5%
 3. Role of topical steroids
 - x. Loteprednols
 - xi. Others?
 4. Reproxolap
 5. SDP-4
 - xii. Mucominetic
 - xiii. Protein-based
- D. Punctal occlusion**
1. When to do and when not to?
 2. Collagen plugs
 3. Silicone plugs
 4. Long duration dissolvable
 - xiv. Tapered
 5. Lacrimal fillers with HA
- E. Biologics**
1. Serum tears
 2. Amniotic membrane
 - xv. Cryopreserved
 - xvi. Dehydrated
 - xvii. Lyophilized

- xviii. Other
- 3. Cytokine extract drops
- 4. ACTH injections

X. Expert Consensus Models

- A. DEWS III report
 - i. Significance
 - ii. Key take away points

XI. Q&A / Discussion