WELCOME TO OUR INAUGURAL EVENT

Ocular Surface Academy

AGENDA

- 8:00 - 10:00 Welcome, CE, breakfast, Tolosa
- 10:00 Head to Pismo Beach
- 10:30 - 12:30 2 hour workshop
- 12:30 - 1:30 Lunch with sponsors
- 1:30 - 3:00 Patient flow through the practice
- 3:15 - 3:45 Selling supplements and supplies
- 5:30-8:30 Round table wrapup at the winery
- Wine tour/tasting/dinner

THANK YOU

Box Medical Systems
Lumenis
Quidel
ScienceBased Health
Tear Film Innovations
Tranquileyes

STREAMLINE DRY EYE INTO YOUR PRACTICE

Let's keep it simple, shall we?

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- 1:30-3:00 Patient flow/Pismo Beach
- 3:15-3:45 Selling supplements and supplies
- 3:45-4:00 Wrap Up
- 5:30-6:30 Wine Tour & Tasting/Tolosa
- 6:30-8:30 Dinner and Wine/Tolosa
- Scott call 805-708-1638

WHY LOOK FOR OCULAR SURFACE DISEASE?

- It's about VISION, and that is job number 1!
- It's prevalent and growing
- It's underdiagnosed
- It's undertreated
- Signs and symptoms don't always match
- Better outcomes if caught early
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OSD PREVALENCE

- Looked at ADDE, MGD, and allergy
- N = 258
- 43.4±16.8 with 159 females and 98 males
- Only 14% had none
- Did not even account for blepharitis

DRY EYE PREVALENCE

- Prevalence of dry eye was reported as 14.5 percent
- 17.9 percent in women
- 10.5 percent in men
- likely to increase

PEDIATRIC SMART PHONE USE

By 3 years of age:
- 68% of children regularly use a computer
- 54% undertake online activities

DIGITAL EYE STRAIN IMPACT, PHYSICAL

Americans report experiencing the following symptoms of digital eye strain:
- 32% eye strain
- 22% dry eyes
- 21% headache
- 22% blurred vision
**Smartphone Use Is a Risk Factor for DED**

Case-controlled study of 916 subjects (2016)
- 60 diagnosed with dry eye disease (signs and symptoms)
- Took phones away for 4 weeks
- Signs and symptoms dropped to ZERO


**Dry Eye, Redefined**

- Dry eye is a multifactorial disease of the ocular surface characterized by a loss of homeostasis of the tear film, and accompanied by ocular symptoms, in which tear film instability and hyperosmolarity, ocular surface inflammation and damage, and neurosensory abnormalities play etiological roles.

- DEWSII, 2017

**What Was the Age Range of This Group?**

7 to 12 years old

**The Old Way of Thinking**

DEWS—Classification of Dry Eye

**The New Way of Thinking**

**Meibomian Glands (Oil Glands of the Eyelid)**

12 yo Female  70 yo Female
Techniques

• Conclusions: Tear hyperosmolarity is specifically associated with higher levels of the proinflammatory cytokine IFN-γ, which correlate with key clinical parameters of DED. The calculated effect size (0.8) suggests that this assay has diagnostic power as a biomarker for evaporative DED.
BACK TO BASICS

- Is this inflammatory?
- Low on water?
- Low on oil?

SYMPTOMS

- Are your eyes dry, watery, itchy, scratchy?
- "Yes, but that’s just allergy"

VALIDATED QUESTIONNAIRE

- OSDI
- SPEED

LET’S BREAK IT DOWN

- SYMPTOMS
  - SPEED
- TEAR QUANTITY
  - Zone Quick Phenol Red Thread Test
- TEAR QUALITY
  - MMP-9
- OCULAR SURFACE DAMAGE
  - Fluorescein (w/TFBUT)
  - Lissamine Green
- ANATOMY
  - Meibography
  - Meibum

LET’S BREAK IT DOWN

- CHOOSE:
  - Most meaningful parameters
  - Most efficiently obtained
  - Can be monitored for change

CHOOSE YOUR TARGET

- Recommended diagnostic ‘homeostatic marker’ tests are the minimum data set to be collected from all patients identified by the screening questionnaire (as many patients do not elicit symptoms unless specifically asked)

- DEWS II - Diagnostic Methodology
  - James S. Wolffsohn, FCOptom, PhD1, Correspondence information about the author FCOptom, PhD James S. Wolffsohn Email the author FCOptom, PhD James S. Wolffsohn, Reiko Arita, MD, PhD, Robin Chalmers, OD, Ali Djalilian, MD, Murat Dogru, MD, PhD, Kathy Dumbleton, MCOptom, PhD, Preeya K. Gupta, MD, Paul Karpecki, OD, Sihem Lazreg, MD, Heiko Pult, MSc (Optom), PhD, Benjamin D. Sullivan, PhD, Alan Tomlinson, FCOptom, DSc, Louis Tong, FRCS, PhD, Edoardo Villani, MD, Kyung Chul Youn, MD, PhD, Lyndon Jones, FCOptom, PhD, Jennifer P. Craig, MCOptom, PhD

LIPIFLOW

- 12 minutes to do both eyes
- Comfortable to patients
- Has consumable costs
- Has peer-reviewed studies
- Designed to cost under 1K

LipiFlow
MANUAL EXPRESSION

- Heat with Bruder mask or similar for 7-10 minutes
- Instill 1 drop proparacaine
- Wear gloves, can use cotton bud.
- Start nasally and work temporally
  - Work from the distal end of the gland toward proximal
- Use firm, steady pressure. Give thickened oil time to express.
- Pros: inexpensive, gives symptomatic relief
  - Cons: uncomfortable for patients, uncontrolled force, may need to be repeated often, time consuming. ARE WE KILLING GLANDS?

OSDI (OCULAR SURFACE DISEASE INDEX)

- Developed by Allergan
- Skewed toward ADDE
  - "Moreover, it is not ideally targeted for patients with dry eye disease."


CUMBERSOME TO TAKE, CUMBERSOME TO SCORE

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