

Title: Building Good Habits: Daily Eye Hygiene and Our Patients
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Length 1 hours

Description: We all know that good habits help keep us healthy: washing our face, brushing our teeth. What about developing healthy eye habits? We will discuss how to identify OSD/DED and then discuss why daily eye hygiene is important for everyone.

Objectives

1. Discuss importance of diagnosing and treating DES/OSD
2. Identifying dry eye patients
3. Discuss treatment regimens for patients at home

Outline

1. Prevalence of DED/OSD
 - a. DEWS II report
 - i. Definition of dry eye
 1. Multifactorial, loss of homeostasis
 - ii. 5-50% of patients, reaching up to 75% in some populations
2. Types of DED/OSD
 - a. Evaporative dry eye
 - i. Evaporation leading to Tear hyperosmolarity
 - ii. Normally functioning lacrimal gland
 - b. Aqueous Deficient dry eye (ADDE)
 - i. Hyper-evaporative state
 - c. Meibomian gland dropout
 - i. Increase with age
 - ii. Certain topical medications
 - iii. Ocular medications
3. Diagnostic testing
 - a. Case examples to discuss how to interpret testing.
 - b. Slit lamp exam
 - i. TBUT
 1. Average greater than 10 seconds
 - ii. Meibomian gland compression
 1. Grade expressibility
 - a. Techniques for expressing
 2. Grade quality
 3. Clear, cloudy, granular or inspissated
 - iii. Staining
 1. Corneal staining
 - a. Rose Bengal
 - b. fluorescein
 2. Lid margin and conjunctival staining
 - a. Lissamine green

- iv. Lids and lashes
 - 1. Gland pitting,
 - 2. Blepharitis/Demodex
 - 3. Biofilm
 - 4. Soaponification
 - 5. Demodex blepharitis
 - a. How to identify in clinic
 - i. Slit lamp exam
 - 1. Collarettes at the base of the eyelashes/cylindrical dandruff at the root of the lashes
 - a. Have you patients look down
 - 2. Scurf
 - 3. Blepharitis
 - 4. Lid margin erythema
- v. Schirmers and phenol thred
- vi. Corneal sensitivity
 - 1. Cotton wisp
 - 2. Aesthesiometer
 - a. Cochet-Bonnet
 - b. Non contact air jet esthesiometer
- c. Point of care testing
 - i. Tear osmolarity
 - 1. Tear hyperosmolarity is a trigger for cascade of signaling evens
 - 2. Leads to release of inflammatory mediators an proteases
 - a. Goblet cell and epithelial cell loss and damage to glycocalyx
 - ii. MMP-9
 - 1. Released in the hyperosmolarity cascade as an inflammatory marker
 - 2. Current option Inflammadry is not quantitative
 - 3. Newer testing in development
- d. Meibography
 - i. Meibomian glands secrete the lipid layer of the tear film
 - ii. Meibomian gland dysfunction
 - 1. Result of glands becoming clogged or atrophied
 - iii. Meibography
 - 1. Infrared non contact viewing at the structure and health of the meibomian glands
 - iv. Grading atrophy
 - 1. Meiboscore
 - a. Grade 0 no atrophy
 - b. Grade 1 1-33%
 - c. Grade 2 34-66%

d. Grade 3 >66%

4. OSD Treatment

a. Case studies to discuss what treatment to use when

i. At Home

1. Artificial Tears

a. PF vs preserved

b. Ingredients and what do they do

i. Carboxymethocellulose

ii. Trehalose

iii. HA

iv. Povidone

v. emulsions

2. Warm compresses

a. Difference between types

b. Wash cloth vs heat mask vs electric heat mask

i. Studies showing need 8-10 min of 106 degree heat applied to melt unhealthy meibum

3. Sleeping moisture goggles

4. Ointment at night

a. Protect front surface

b. CPAP

c. Poor lid closure

d. Vitamin A

5. Lid scrubs

a. TTO

b. HA

c. Sprays/foams

d. Make up removers

6. Lash growth serums and cleaning of false lashes

7. Neutraceuticals

a. Omega 3 Fatty acid

i. DHA/EPA

ii. ALA

iii. Studies

1. Dream

ii. Ensuring patients get the products you recommend

1. In office sales

2. Samples

3. Online sales platforms

a. Myze

b. Dry Eye Rescue

iii.