

## Dry Eye That's Not Dry Eye

All burning, irritated eyes aren't "dry eye." This course will present several anterior segment cases that were initially misdiagnosed as Dry Eye Disease. Attendees will be offered case history, exam data and diagnostics testing results to interactively arrive at the proper conclusion. The course takes a deep dive into potential differential diagnoses that mimic Dry Eye Disease. Each case reviewed are conditions commonly seen in optometric practice and offer clinical application.

### Objectives:

- To accurately identify signs and symptoms of Dry Eye Disease
- To demonstrate the clinical applications and benefits of diagnostic testing in ocular surface disease
- To inform attendees about anterior segment conditions that mimic Dry Eye Disease
- To educate primary care optometrists about sign and symptoms and potential differential diagnoses in Dry Eye Disease
- To provide clinical cases to illustrate principles outlined in the course.

### Outline

- I. Dry Eye Disease
  - a. Demographics

- i. Females>Males
  - ii. Changing demographics
- b. Causes
  - i. Anatomical
  - ii. Physiological
  - iii. Autoimmune
    - 1. Sjögren's syndrome
    - 2. Lupus
      - a. Primary
      - b. Secondary
    - 3. Rheumatoid arthritis
  - iv. Modern risk factors
    - 1. Surgical
      - a. Cataract
      - b. Refractive
      - c. Oculo-plastic
    - v. Medications
    - vi. Hormone changes
      - 1. Menopause
      - 2. Birth control pills
      - 3. Pregnancy
    - vii. Diseases
      - 1. Diabetes
      - 2. Thyroid conditions
- c. Sign and symptoms

- i. Hyperemia
- ii. Epiphora
- iii. Irritation
- iv. Visual fluctuations
  - 1. Blur
  - 2. Contrast sensitivity

## II. Case #1 Conjunctivochalsis

### a. Case history

- i. Patient demographics
- ii. Patient symptoms
- iii. Length of complaint
- iv. Prior or failed therapies

### b. Exam data

- i. Visual acuity
- ii. Diagnostic testing results
  - 1. Oculus keratograph Tear Prism Height
    - a. May present as artifact
- iii. Slit lamp exam results
  - 1. Anterior segment photos

### c. Differential diagnoses

- i. Dry Eye Disease
- ii. Allergic Conjunctivitis
  - 1. No true chemosis
  - 2. No response to allergy medications
- iii. Conjunctivochalsis

- d. Treatment options
  - i. Pinch-Paste technique
    - 1. Pre- and Post-operative considerations
    - 2. Conjunctival buttonhole created
    - 3. Fibrin glue injected (hold 30 seconds)
    - 4. Excise excess conjunctiva
    - 5. Pre- and Post- photos provided
  - ii. Conjunctival revision with amnio-graft
  - iii. Risks and benefits
- III. Case #2 Punctal Stenosis
  - a. Case history
    - i. Patient demographics
    - ii. Patient symptoms
    - iii. Length of complaint
    - iv. Prior or failed therapies
  - b. Exam data
    - i. Visual acuity
    - ii. Diagnostic testing results
      - 1. Oculus keratograph Tear Prism Height
      - 2. Phenol red thread (PRT) testing results
    - iii. Slit lamp exam results
      - 1. Anterior segment photos
  - c. Differential diagnoses
    - i. Dry Eye Disease
    - ii. Nasal lacrimal duct obstruction

1. Discussion about dilation and irrigation
        - a. Appropriate to time perform
        - b. Technique
        - c. Risks and benefits
    - iii. Puntal stenosis
      1. Causes
        - a. Aging
        - b. Medications
- IV. Case #3 Allergic Conjunctivitis
  - a. Case history
    - i. Patient demographics
    - ii. Patient symptoms
    - iii. Length of complaint
    - iv. Prior or failed therapies
  - b. Exam data
    - i. Visual acuity
    - ii. Diagnostic testing results
    - iii. Slit lamp exam results
      1. Anterior segment photos
  - c. Differential diagnoses
    - i. Dry Eye Disease
    - ii. Blepharitis
    - iii. Allergic conjunctivitis
      1. Anterior segment findings
        - a. Papillae at palpebral conjunctiva



1. Treatment options

- a. Topical steroids
- b. Steroid injection
- c. Surgery

- VI. Case #5 – Decompensated Phoria

- a. Case history

- i. Patient demographics
- ii. Patient symptoms
  1. Constant lateral diplopia
- iii. Length of complaint
  1. 6 months
- iv. Prior or failed therapies

- b. Exam data

- i. Visual acuity
- ii. Diagnostic testing results
- iii. Slit lamp exam results
  1. Anterior segment photos
- iv. Refractive data
  1. Phorias

- c. Differential diagnoses

- i. Dry Eye Disease
- ii. Decompensated phoria
  1. Diagnostic considerations
    - a. Imaging

## 2. Treatment options

a. Occulsion

b. Prismatic correction