Managing the Psychology of Dry Eye Disease
The Role of Diagnostics

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• 25 million Americans report suffering from Dry Eye\textsuperscript{1}
• Results from the 2012 Gallup poll project the number of adults who frequently experience Dry Eye\textsuperscript{2}

Prevalence of Dry Eye Disease

Projected Growth in Frequent Dry Eye Sufferers (in millions)\textsuperscript{2}

2012: 26.4
2022: 29.1
10.2% Growth

Projections of frequent Dry Eye sufferers are calculated by applying incidence by age to US Census Population estimates in each age group in 2012 and 2022. Projections assume no change in incidence levels over the next decade.\textsuperscript{2}

\textsuperscript{1} Market Scope Data, Allergan, Inc. 2011; \textsuperscript{2} The Gallup Organization, Inc. The 2012 Gallup Study of Dry Eye Sufferers, 2012.
Who Are These Dry Eye Sufferers?

“…a multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance, and tear film instability with potential damage to the ocular surface. It is accompanied by increased osmolarity of the tear film and inflammation of the ocular surface.”

- DEWS, 2007
“Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:

1. Disproportionate and persistent thoughts about the seriousness of one’s symptoms
2. Persistently high level of anxiety about health or symptoms
3. Excessive time and energy devoted to these symptoms or health concerns”

-DSM V, 2014

-DEWS, 2007

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Dry Eye Dismissed

Real note from another physician accompanying a new patient:

“This patient has too many complaints, and all the tests are negative. The problems are all in her head and she is hopeless, so I am referring her to you.”

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The Placebo Effect

- 1/3 of patients demonstrate clinical improvement
- 30-40% of pain patients responded equally to 10 mg morphine
- Was the history of medicine prior to 19th century largely placebo?

Beecher, H. The powerful placebo. JAMA 1955; 159:1602-1606
What Makes Dry Eye Disease Unique?

Unique Pathophysiology

Unique Psychology

Patient Psychology

• Two radically different patient types
  – The “hand holder”
  – The “hands off-er”
Patient Psychology

• The “hands off-er”
  – Tends to be younger
  – Tends to be busy, over-extended in professional or personal life
  – Thinks of dry eye as a nuisance, not a disease
  – Tends to minimize or ignore the symptoms of their disease
  – Not interested in follow-up visits

Patient Psychology

• The “hand holder”
  – Tends to be middle-aged or older
  – Focuses on negative impact of dry eyes on their career or personal interests
  – Embellishes symptoms or describes level of disability out of proportion to disease signs
  – Requires excessive chair time and frequent follow-up visits
The Arguments from Finance and Time

<table>
<thead>
<tr>
<th>Visit</th>
<th>Cost</th>
<th>Eye Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>$121</td>
<td>Comprehensive</td>
</tr>
<tr>
<td>2nd</td>
<td>$60</td>
<td>4-6 Week Follow Up</td>
</tr>
<tr>
<td>3rd</td>
<td>$60</td>
<td>3-6 Month Follow Up</td>
</tr>
<tr>
<td>4th</td>
<td>$60</td>
<td>6-12 Month Follow Up</td>
</tr>
<tr>
<td>5th</td>
<td>$196</td>
<td>Adding Plugs (optional)</td>
</tr>
<tr>
<td>Total</td>
<td>$497</td>
<td>Complete Dry Eye Workup</td>
</tr>
</tbody>
</table>
Arguments from Finance and Time

- Anterior Segment Photos
  - $25 x 2 per year=$50
  - $50 x 1400=$70,000

- Corneal Topography
  - $32 x 1400=$45,000

- $70,000 + $45,000=$115,000
Arguments from Finance and Time

$740,250

Treating the Mind

- Explain
- Objectify
- Inspire
Explain the Disease

• Remind the patient that this is a disease! Not simply a nuisance
• This is a disease that can progress; it can get both better and worse affecting quality of life
• There is an inflammatory basis to the disease
• Like other diseases, patients require a medicine to completely treat the disease

Objectify the Disease

• Patients need a “mile-marker” to understand and to track their progress
• Objective data gives patients a framework to understand why they are better or, why they are worse
• Improve screening and diagnosis: OSDI, Schirmer’s, Lissamine green, anterior segment photography, osmolarity, MMP-9, corneal topography
When the DC-4 Digital Camera* attachment is used together with the optional BG-5 LED Background Illuminator*, the SL-D701 has the capability of observing and photographing meibomian glands.

Meibography

The meibomian glands are located in the inner part of the lids.
Meibomian Gland Dysfunction (MGD) is associated with dry eye, lid inflammation or blepharitis and corneal inflammation or keratitis. It is important for eye care practitioners to be able to observe and document the condition of the Meibomian glands.

Meibography

Meibomian Gland Dysfunction is one of the most common physical findings in primary eye care patients and it is one of the major causes for dry eye syndrome.
Meibography

Observation of the meibomian glands used to be a complicated and uncomfortable procedure for the patient.

It involved placing the tip of a fiber optic probe against the everted lid and the observation was made by transparency.

Meibography

The new BG-5 with LED provides a better image of the meibomian glands by using infra red light.

Also, by being a non contact device it does not become in contact with the patient’s eye increasing cooperation and compliance.
Objectify the Disease

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Inspire a Sense of Optimism

- They have a treatable disease
- Customized treatment strategies are available designed to make more of one’s own natural tears
- Benefits of treatment may take time; minimize discouragement over lack of immediate effect
- Reassure patients regarding the need to treat this condition for the rest of their lives
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