Dry Eye Disease: What the patients say and what we observe... are they correlated?

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Introduction

• DEWS 2007:
  – Ocular surface and tear multifactorial disease → ocular discomfort, visual disturbance and tear film instability → potential damage to the ocular surface.
  – ↑ osmolarity of the tear film and inflammation of the ocular surface → well-recognized mechanisms for inflammatory and autoimmune process.
  – External and Internal ethipathogenic factors well-classified.

• Prevalence is about 20%.

• No epidemiologic literatute in <20 years population.
Material and Methods

- Prospective Study

- Age Groups:
  - < 20y
  - 21-44y
  - 45-64y
  - >65y

- Patient aswears questions:
  - Ocular issues during the day
  - Issues variation during the day
  - Aggravating conditions
  - Labour abstention
  - General Impact on quality

- BCVA and anterior segment observation

- Statistics analysis by SPSS® - *p*<0.05
- Contact Lens Uses Excluded

- Exclusion Criteria:
  - Topical medication
  - Previous Refractive Surgery (LASIK)
  - Ocular surface disease: Herpes Simplex Virus, Ocular Pemphigoid, Stevens-Johnson Syndrome, Aniridia
  - Lagophthalmos
  - Skin disease with ocular achievement
  - Autoimmune Disease
  - Infectious Disease: HCV, HIV
  - Chemotherapy and Radioterapy Treatment
Results

- 178 patients, 62.2% females

- BVCA: 0.92 (decimal scale)

Median classification on impact in quality of life due to ocular symptoms in different age groups.

Relation between BUT and conjuntivochalasis in different age groups

Relation between anterior and posterior blepharitis and period of the day the symptoms are worst

Impact on Life quality

Relation between lissamine green test results and the impact on life quality in different age groups
Results

Median classification on red eyes (blue) and photophobia (green) in different age groups.

Relation between aggravating factors and symptoms in different age groups.

Blue = Computer
Green = Reading
Brown = Artificial environment (eg.: air conditioning)
Purple = External environment (eg.: wind)

Median classification on eye fatigue (pink) and visual disturbances (blue) in different age groups.

Median classification on tearing (green) and stinging (brown) in different age groups.
Conclusion

If lissamine green staining increases, ocular issues are superior as the impact on quality of life.

Posterior blepharitis are related with worsening of symptoms in the morning, as literature describes.

Red eyes and photophobia are the more important issues to youth age group (<20 years).

Fatigue eyes and visual disturbances are critical to active age groups (21-64 years).

Tearing and sting are more prone to older age group (> 65 years).

All patients remark aggravating factors as worsening of their ocular symptoms.

The impact of ocular issues on quality of life is relevant. Median classification is 3 on 5 in all age groups.

Clinical and symptomatic relationship is proposed in some studies as Salisbury Eye Evaluation and Ladingham et al.