

OCULAR SURFACE DISEASE INCIDENCE IN DIABETIC AND GLAUCOMA PATIENTS AS POTENTIAL CONTACT LENS USERS

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Objective: Ocular Surface Disease incidence analysis in diabetic and open angle glaucoma (OAG) patients on topical medical therapy as potential contact lens users

Introduction: Ocular Surface Disease(OSD)(DEWS 2007) is multifactorial disease of tears and ocular surface that results in symptoms of discomfort, visual disturbances, tear film instability and damage, increased tear film osmolarity and inflammation.

Classification: hyposecretory (SySjogren/non-Sjogren): evaporative form (extrinsic/intrinsic) Delphi panel grade classification in stages:

- I grade (TBUT>15s)
- II grade (IIa= 10-15s / IIb=5-10s)
- IIIgrade (TBUT < 5s)



OSD occurs due to multifactorial etiology: drugs, *contact lenses*, eye and systemic diseases, surgery, trauma. **Antiglaucoma drops** cause exacerbation or occurrence of dry eye symptoms due to main substances or preservatives (benzalkonium, BAK) dose or time dependent. **Diabetes** cause reduce tear production and tear film instability

Methods: TBUT test of tear film stability and Delphi Panel grading scale

DEWS GRADE (TBUT- S)	OAG EYES DROPS WITH PRESERVATIVES No(%)	OAG EYES DROPS NO PRESERVATIVES	HEALTHY EYES	DIABETIC EYES
I (TBUT >15s)	15 (37,5%)	34 (85%)	32 (80%)	/
II a (TBUT =10-15s)	10 (25%)	4 (10%)	3 (7,5%)	164 (30%)
II b (TBUT = 5 - 10s)	15 (37,5%)	2 (5%)	5 (12,5%)	301 (55%)
III (TBUT <5s)	/	/	/	82 (15%)
IV (TBUT=0)	/	/	/	/
T O T A L (EYES)	40	40	40	547

Unstable tear film was in **diabetic patients(55%)** and glaucoma eyes on **antiglaucoma preservative drops(37,5%)**. **Grade I in healthy 80% and without preservatives 85%**.

Conclusion: OSD impacts on contact lens fitting and visual acuity. To improve the quality of life and compliance it is necessary to correct OSD parameters apply artificial tears, ask them for diseases. Higher prevalence:glaucoma (37,5%) and diabetes (55%).