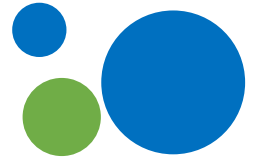


Pre-Ocular Tear Film (POTF) and Dry Eye Evaluation



White light evaluation

Normal observations

Specular reflection of the ocular surface

regular, smooth surface

Blink

complete, 12-15/min (<TBUT)

Lid apposition

good apposition with the globe along the entire lid margin (no entropion/ectropion)

Punctum

open and good apposition

Debris in the POTF

minimal to none

Tear Meniscus

TMH Inf (0.2-0.4mm) > Sup
Slight coloration, no frothing or foaming, little to no debris, movement with blink towards the punctum

Viscosity

moderate movement along the lower tear meniscus

Lashes

clear, no debris, no cylindrical dandruff (CD)

Meibomian glands

easily expressed with clear liquid secretions

Using the meibomian gland evaluator (MGE), rate a 0 (no secretion) to 3 (liquid secretion) for each of 5 glands in the nasal, central and temporal zones of the lower lid for a possible total of 45. View video at link provided.¹



Vital Staining

Normal observations

TBUT	> 10 seconds
Fluorescein staining	< grade 1 (IER-CCLR/EFRON scale) or <5 spots on the cornea (TFOS DEWSII)
Rose bengal/ Lissamine green	< grade 1 (IER-CCLR/EFRON scale) <5 spots on the conjunctiva) (TFOS DEWSII)
Upper lid margin staining (ULMS)/ Lid Wiper Epitheliopathy (LWE)	<25% width and <2mm length upper conjunctiva) (TFOS DEWSII)

Tear and Dry Eye Disease (DED) Tests

Normal Observations

Ocular Surface Disease Index (OSDI)	Score <13/100
Dry Eye Questionnaire (DEQ-5)	Score <6
Schirmer (w/o anesthesia)	5-10 mm/5 min
PRTT / CTT	>10 mm /15 sec
NIBUT	>Fluorescein TBUT
LIPCOF	none
Osmometer	<308 or <8 mOsm/L interocular difference (TearLab)
MMP-9	<40 ng/ml (InflammaDry)
Lipid layer thickness (LLT)	>80 nm
Jones Test	patent nasolacrimal system
Tear ferning	Type I or II (Rolando's criteria)
TFOS DEWSII diagnostic algorithm for DED (consult tearfilm.org) ²	OSDI<12/100 or DEQ-5 <6, TMH>0.25, osmolarity <308 and NIBUT >10sec
Meibography (Meiboscale)	consult scale ³



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1. Meibomian Gland Evaluator. TearScience. <https://vimeo.com/193398255>
2. https://www.tearfilm.org/ckfinder/userfiles/files/Tfos_4%20pager%20-%20DEWSII%20%20FORMATO%20AMERICANO%202017.pdf
3. Pult H, Riede-Pult B. Comparison of subjective grading and objective assessment in meibography. *Cont Lens Anterior Eye*. 2013 Feb;36(1):22-7

Prepared by Etty Bitton