

Forceps-Free Meibomian Gland Expression (FF-MGE): Updated management of posterior blepharitis & MGD

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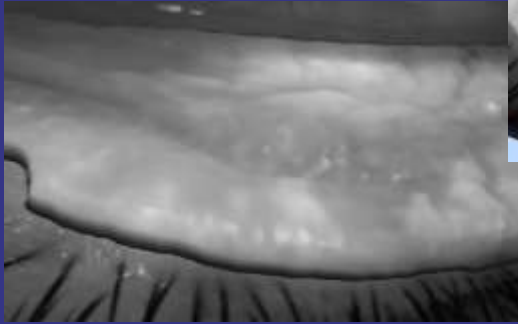
OSD – Posterior blepharitis



OSD – MGD

Diagnostic Tests

► Meibography

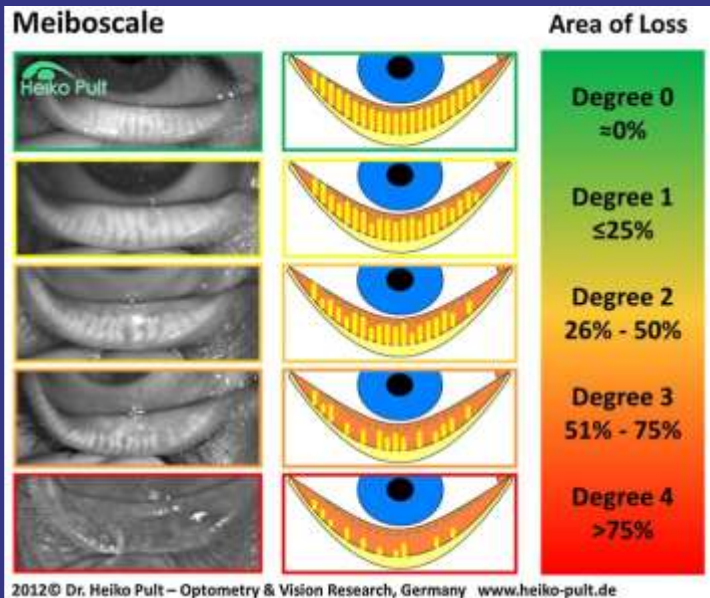


OSD – MGD

Diagnostic Tests

► Meibography

- Infrared light to image the meibomian glands (MG)
- Graded according to area of MG loss
- Abnormalities recorded: Distorted, Tortuous, Shortened, Thinned, Thickened, Tadpole



OSD – MGD

Diagnostic Tests

- ▶ Meibography



Degree 1
≤25%



OSD – MGD

Diagnostic Tests

- ▶ Meibography



Degree 2
26% - 50%



OSD – MGD

Diagnostic Tests

- ▶ Meibography



Degree 3
51% - 75%



OSD – MGD

Diagnostic Tests

- ▶ Meibography



Degree 4
>75%



OSD – MGD

Diagnostic Tests

▶ IF (Interferometry)

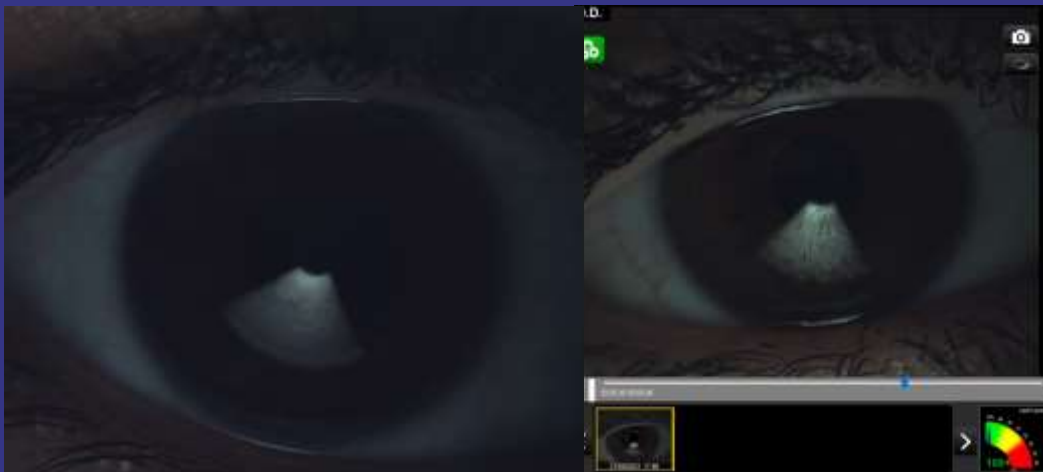
- ▶ Measures the Lipid Layer Thickness (LLT)
- ▶ Interferences between lipid and aqueous layers are detected and thickness calculate by neural networks
- ▶ Normal thickness from 80 nm m to 160 nm
- ▶ Borderline thickness from 60 nm to 80 nm
- ▶ Lipid layer deficiency below 60 nm



OSD – MGD

Diagnostic Tests

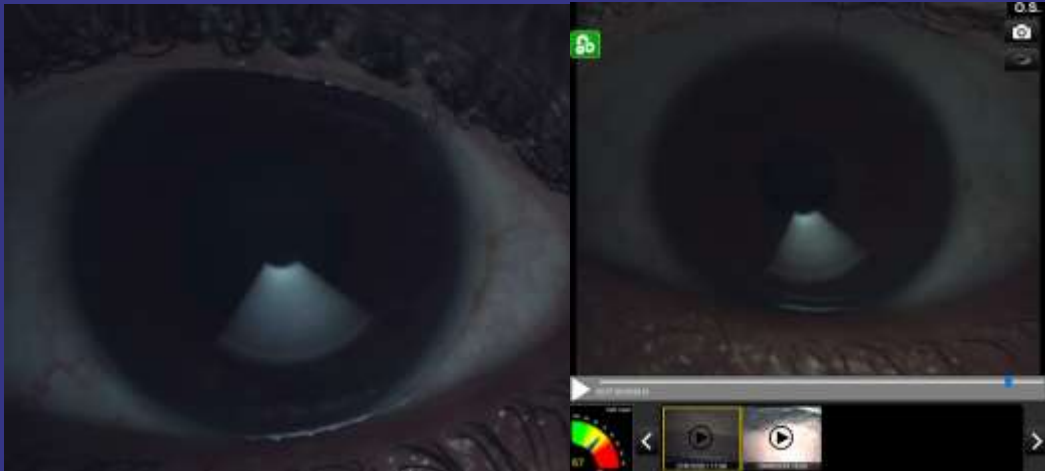
▶ IF (Interferometry)



OSD – MGD

Diagnostic Tests

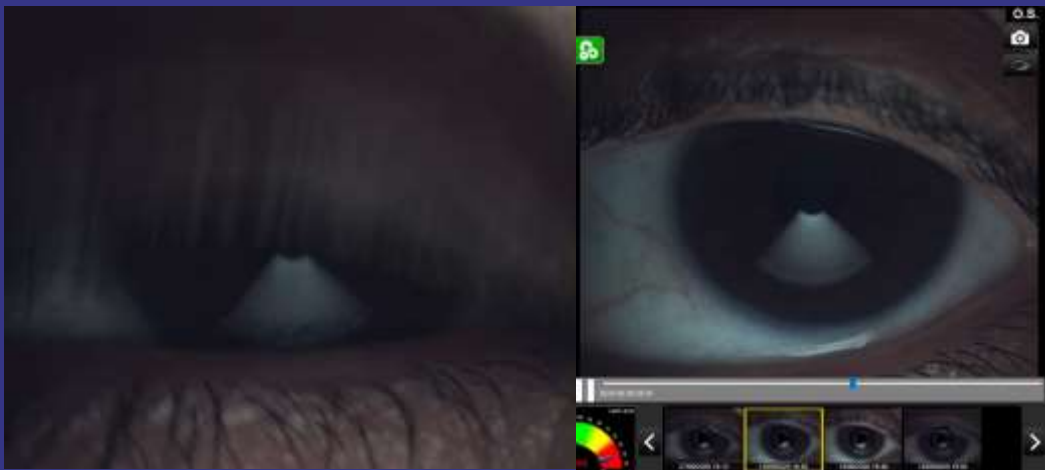
- ▶ IF (Interferometry)



OSD – MGD

Diagnostic Tests

- ▶ IF (Interferometry)



OSD – MGD

TFOS DEWS II: Severity Based, Staged \uparrow Recommendations

Step 1

- Education, environmental and dietary modifications, ocular lubricants, lid hygiene (warm compresses)

Step 2

- Topical prescription (steroids, cyclosporine, lifitegrast), topical or oral antibiotics (eg, doxycycline), punctal plugs, physical heating, and expression of the meibomian glands

Intense Pulse Light (IPL) +
MG expression
In MGD

OSD – MGD

TFOS DEWS II: Severity Based, Staged \uparrow Recommendations



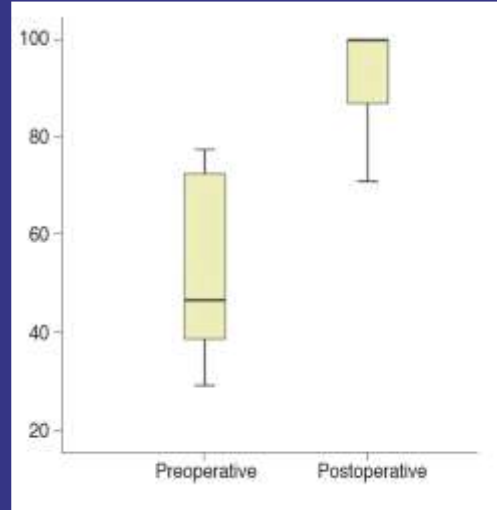
MG expression

In MGD

OSD – MGD

Treatment

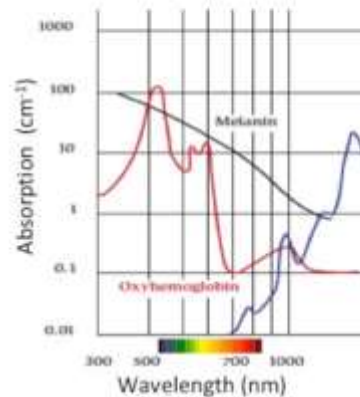
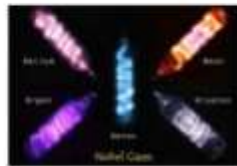
- ▶ IPL + MG expression
 - ▶ 193 patients over 2 years
 - ▶ 3 biweekly IPL sessions + MG expression
 - ▶ Mean pre-operative LLT
 43.7 ± 23.3
 - ▶ Mean post-operative LLT
 91.6 ± 16.1
 - ▶ $P < 0.001$



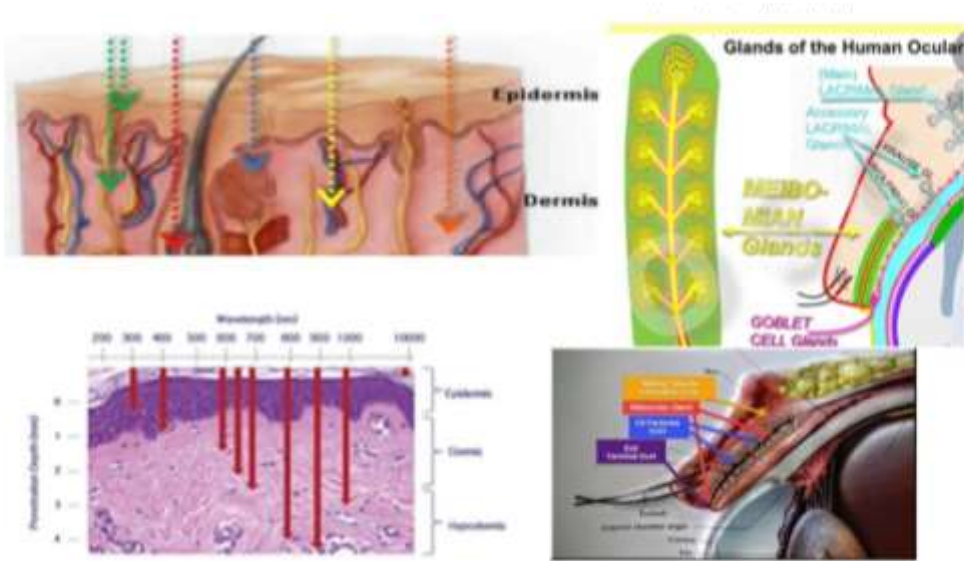
Change in LLT after IPL and MG expression

How IPL Works

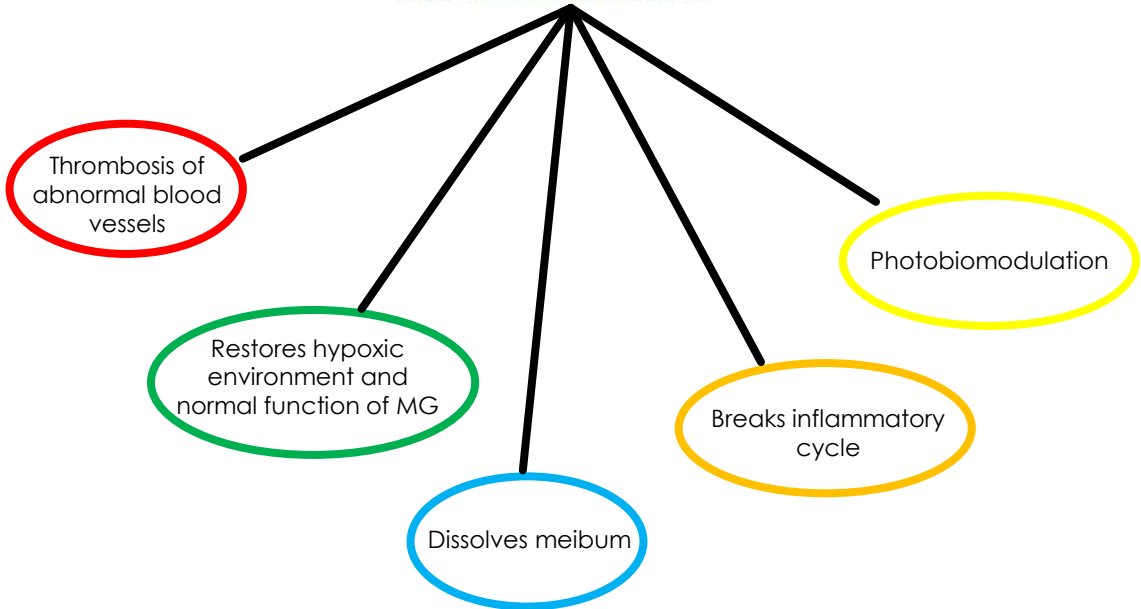
- A Xenon flashlamp
- Broad Band of Light: 500-1000nm
- Cut Off Filter
- Light is pulsed in milliseconds
- Fluence 10 to 30 Joules/cm²

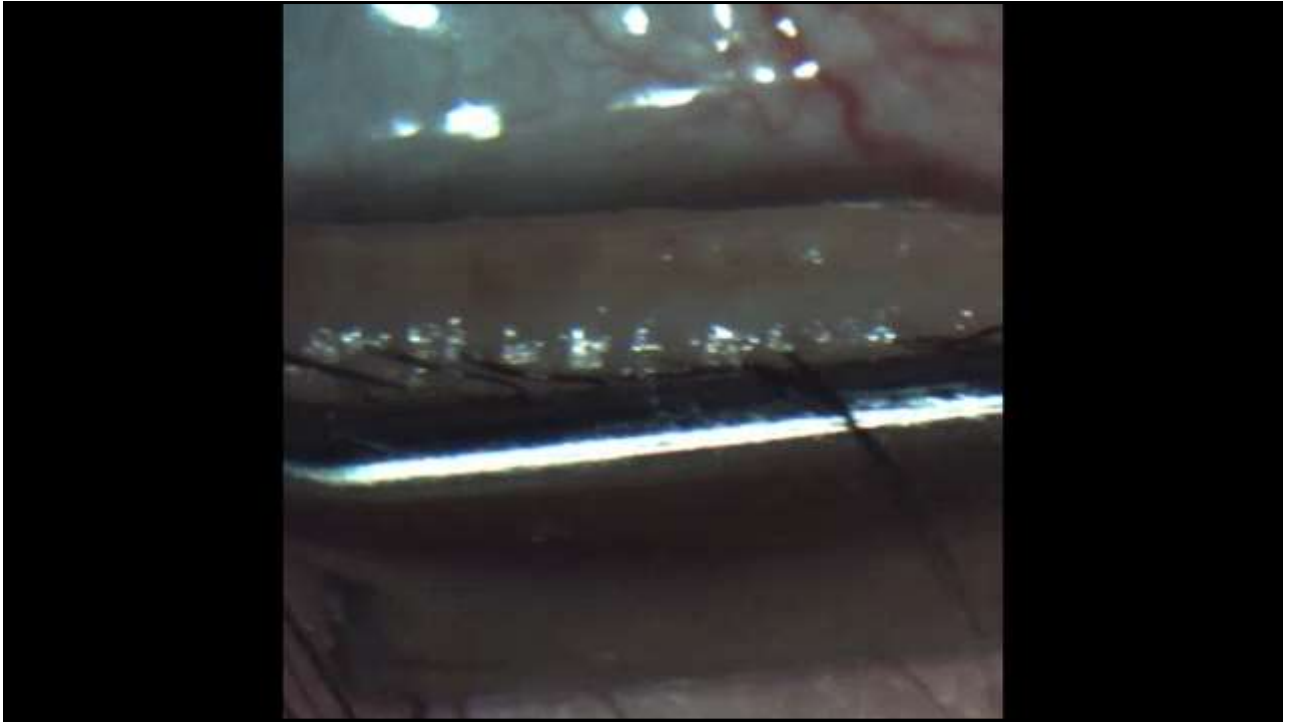


How IPL Works



How IPL Works





..... thank you