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**Dry Eye Dx and Tx**

## **Progress in Unraveling Meibomian Gland Dysfunction**

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In late 2008, the Tear Film and Ocular Surface Society (TFOS), a nonprofit organization with the primary mission of advancing research, literacy, and educational aspects of the tear film and ocular surface scientific field across the globe, initiated a workshop on meibomian gland dysfunction (MGD). More than 50 international experts participated in the effort, which occurred over a two-year period. The process was sponsored generously through industry support via unrestricted grants to TFOS, allowing volunteers to come together to create a consensus overview of the field. In addition to an exhaustive international literature-based review of the salient research, emerging concepts such as a new diagnostic and management algorithm are also included. This report, published in the March 2011 issue of *Investigative Ophthalmology & Visual Science*, is the most current, definitive summary of the meibomian gland in health and disease.

A two-page perforated pull-out summary of the full report, compliments of TFOS, is included in this issue of *Contact Lens Spectrum*. The full report can be downloaded at the TFOS website ([www.tearfilm.org](http://www.tearfilm.org)).

### **Evidence-Based Approach**

Evidence-based principles guided the preparation of the MGD Workshop report. The same evidence guidelines were used in the International Dry Eye Workshop process and are a modification of the American Academy of Ophthalmology Preferred Practice Patterns guidelines. As such, the new diagnosis and management algorithm presented in the report is an assimilation of the clinical research published to date.

It is important to note that evidence on management of MGD is somewhat limited, the existing studies are often relatively small and are neither randomized nor placebo-controlled, and most management and therapeutic techniques are used off-label. Thus, the recommendations reported here likely will continue to undergo evaluation in both clinical practice and clinical research.

### **Key Clinical Findings**

MGD may be the most common cause of evaporative dry eye and may also have some association with aqueous-deficient dry eye. Therefore, a complete dry eye examination should include symptom evaluation, clinical assessment of the meibomian glands, meibomian gland expressibility, and evaluation of the quality of meibomian gland secretions. Co-existing dry eye should be evaluated through assessment of tear film instability and ocular surface staining. It is our hope that this report will motivate clinicians to look at the meibomian glands more closely, as well as inspire future research with the ultimate goal of improving care of MGD and dry eye patients.

The eyecare community at large receives with excitement the Meibomian Gland Workshop Report. A momentous undertaking of TFOS, it will serve as a superlative resource for clinicians and researchers striving to unravel the mysteries and management of ocular surface disease. **CLS**

*For references, please visit [www.clspectrum.com/references.asp](http://www.clspectrum.com/references.asp) and click on document #186.*

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