

# Contact Lens Update

CLINICAL INSIGHTS BASED IN CURRENT RESEARCH

## Overview: 2013 report from the Tear Film & Ocular Surface Society's Workshop on Contact Lens Discomfort

April 28th, 2014



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### Contact Lens discomfort is a complex problem

Contact lens discomfort is a complex puzzle that clinicians and researchers are working aggressively to solve. It is a commonly encountered problem, with approximately 50% of contact lens wearers experiencing it, especially towards the end of the day.<sup>1,2</sup> There are no obvious signs in many contact lens wearers who experience contact lens discomfort, which adds another dimension to the complexity of this condition.

Contact lens discomfort is still the number one factor related to discontinuation of contact lens wear.<sup>3-8</sup> This condition impacts millions of contact wearers worldwide with some frequency or magnitude. It is of major concern for both eye care practitioners and patients, in that its end result is patient dissatisfaction and permanent cessation or “drop-out” from contact lens wear. There is still a lack of consensus and standardization on the characterization of this condition, including its diagnosis and management and several other aspects.

### The Tear Film & Ocular Surface Society's Workshop on Contact Lens Discomfort

The Tear Film & Ocular Surface Society (TFOS) initiated the contact lens discomfort workshop in January 2012, where a group of 79 experts in the field participated on one or more subcommittees. A total of eight subcommittees were formed. Each subcommittee generated a detailed report based on an evidence-based approach of the literature on various facets of contact lens discomfort, including its definition and classification; the epidemiology of contact lens discomfort; contact lens materials, design, and care; neurobiology of discomfort and pain; interactions of contact lenses with the ocular surface and adnexa; contact lens interactions with the tear film; clinical trial design and outcomes; and treatment and management of contact lens discomfort.

The workshop report has been published in a special issue of Investigative Ophthalmology and Vision Science (Invest Ophthalmol Vis Sci 2013;54(11): Special Issue).

### Outcome of the TFOS workshops

A critical outcome of this workshop was a definition of contact lens discomfort, which will be very useful and can be applied in future clinical trials. This can also bring about consistency across research activities and will potentially allow for comparisons across different studies conducted around the world. This workshop also provides a structure that future studies and clinical activities can build upon when conducting contact lens discomfort-related studies.

The workshop also pointed out the lack of prospective natural history studies in literature. Studies of this nature

are required and will help us better understand the incidence and risk factors of contact lens discomfort, including patient- or contact lens-related factors (materials, design, care systems etc.). The interaction between the tear film, the ocular surface and the presence of a biomaterial (contact lens) needs to be better understood.

Future clinical trials that are bias-free with adequate sample sizes and that use specific symptoms assessment questionnaires with well-controlled lens materials, design, care products, and wearing schedule are warranted. These efforts will offer a precise assessment of the symptoms of contact lens discomfort. Eye care practitioners must be conscientious when dealing with patients who experience contact lens discomfort, and think ahead in terms of its prevention and management of even before symptoms arise. This approach will certainly improve long-term patient satisfaction for successful, safe and symptom-free contact lens wear.

## REFERENCES

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