Dry Eye: The Elephant in the Room?

Clearly dry eye symptoms are extraordinarily prevalent for patients seen in optometry and ophthalmology clinical practices. In fact dry eye symptoms may be the most common presenting symptoms in an otherwise healthy aging patient. Dry eye symptoms are also commonly attributed to computer use, flying in commercial airlines, associated with hormonal changes for women, in contact lens use, and often associated with occupational sites where there is low humidity.

Perhaps because of the widespread symptomatic reports of the “dry eye” condition, there are widespread efforts in research, industry, and clinical practice to find symptomatic relief on many fronts.

The Guest editors, leaders in both optometry and ophthalmology in this field, have brought together a fine compendium of 20 reviews and articles on the latest in research related to dry eye. The articles they have accepted cover a broad range for this dedicated issue of Optometry and Vision Science. They include topics attributed to at least four core mechanisms recently identified in an international DEW report (see Guest Editorial) in the etiology of dry eye; tear instability, tear hyperosmolarity, association with inflammatory pathways, and ocular surface damage. But this feature issue of Optometry and Vision Science goes further; it addresses the all important patient symptoms and comfort and their measurement, despite the fact that these symptoms often remain difficult to measure and to relate directly to the core mechanisms.

The four Guest Editors were ably led by our own Academy fellow, Kelly Nichols.

Each Guest Editor is well known in the field and has made substantial clinical research contributions in her or his own right. Their accompanying Guest Editorial highlights the excellent articles in this issue and points to a recent international report that provides a road map for dry eye research for “the next generation of tear film and ocular surface clinicians and researchers.”

About Our Guest Editors

Kelly Nichols, OD, MS, MPH, PhD, FAAO received her clinical training at the University of California School of Optometry and her research and public health training at the Ohio State University, where she now is a faculty member. Her research program, supported by NIH through the National Eye Institute, focuses on evaluating the association between tear film instability, tear lipidomics, meibomian gland structure, and dry eye symptoms in postmenopausal women. Kelly is a member of the Steering Committee for the International Dry Eye Workshop (DEWS) and serves as a member of the Medical and Scientific Advisory Board, Sjogren’s Syndrome Foundation.

Gary Foulks, MD is well known in both optometry and ophthalmology circles, being the past president of both the Cornea Society and the Contact Lens Association of Ophthalmologists. He currently serves as the editor in Chief-in-Chief of the Journal “The Ocular Surface.” Gary did his clinical training at Columbia, Duke and Harvard universities and is the Arthur and Virginia Keeney Professor of Ophthalmology at the University of Louisville School of Medicine in Kentucky. He is also director of Corneal/External Disease and Refractive Surgery at U of L’s Kentucky Lions Eye Center and medical director of the Kentucky Lions Eye Bank. He actively conducts clinical research in dry eye therapy and rehabilitation of the cornea through medical and surgical care and is active in translating advances in clinical research into state of the art clinical care.
Debra Schaumberg, ScD, OD, MPH, FAAO enjoys a fine reputation in range of epidemiological research ventures including being at the forefront identifying novel risk factors for dry eye syndrome. Her research also addresses risk factor issues in cataract, diabetic retinopathy, and age-related macular degeneration. It is always aiming to provide for the informed development of preventative and therapeutic strategies for these eye diseases. Debra is a faculty member at Harvard Medical School in the departments of medicine and ophthalmology, as well as serving as the Director of Ophthalmic Epidemiology at Brigham and Women’s Hospital in Boston. Debra has just completed a second term on the Optometry and Vision Science Editorial Board.

Janine Smith MD is the Deputy Clinical Director, Division of Epidemiology and Clinical Research at the National Eye Institute of the National Institutes of Health. She serves on both the Boards of The Ocular Surface journal and the Sjogren’s Syndrome Foundation. Janine trained in ophthalmology at Johns Hopkins University Wilmer Ophthalmological Institute in Baltimore (uveitis and ocular immunology), and at the National Eye Institute (cornea and external diseases). Her research addresses the pathogenesis and treatment of immune-mediated ocular surface diseases. She also works on the development and standardization of outcome measures for anterior segment diseases for use in clinical trials.

As a result of their efforts and the fine submissions on the dry eye topic, Optometry and Vision Science is proud to present this impressive issue dedicated to “Dry Eye: Clinical and Research Challenges.”

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