EDUCATION

AEVR Congressional Briefing Addresses Dry Eye Research

On June 8, AEVR held a standing room-only Congressional Briefing that focused on the causes of dry eye disease and potential therapies that are being researched through funding from the NEI/NIH and private industry. Dry eye, which affects up to 20 million Americans, occurs when the eye does not produce tears properly or when the tears are not of the correct consistency and evaporate too quickly. For some people it feels like a speck of sand in the eye, or stinging or burning that does not go away. For others, dry eye can become a painful chronic and progressive condition that leads to blurred vision or even vision loss if it goes untreated, due to inflammation that can cause ulcers or scars on the cornea, the surface of the eye.

Entitled Dry Eye: Today's Research, Tomorrow's Solutions and co-sponsored by several AEVR members and coalition partners (see box below), the briefing featured NEI-funded clinician-scientist Kelly K. Nichols, O.D., M.P.H., PhD., who serves as the Dean of the School of Optometry at the University of Alabama at Birmingham.

"Although it has been ten years since I last spoke on Capitol Hill about dry eye, I look forward to speaking to you again—hopefully in a year or two and not another ten years—as our knowledge of dry eye and potential research direction is greatly accelerating and will result in advances in clinical care."

--Dr. Nichols

Dry eye is one of the most common of all eye conditions, primarily affecting adults 45 years and older, with an estimated six million Americans over age 65 with severe dry eye—the majority of which are women. Although researchers have long known about age and gender as factors, they are now discovering ethnic and racial differences, and that dry eye impacts younger and younger patients. Dry eye can have many other causes including environmental exposure, medications, eye surgery (such as laser correction surgery), immune system disorders such as Sjögren’s syndrome, lupus, or rheumatoid arthritis, and an increasingly common cause—staring at computer or video screens for too long without blinking.

Therapies have been developed or are in the drug-development pipeline to treat dry eye—some of which affect the lacrimal glands while others affect the meibomian glands—research is vital to develop more focused and potentially personalized treatment approaches. In expressing hope for the future, Dr. Nichols displayed a timeline which showed progress over the past twenty years, including the first consensus dry eye definition in 1995 to a second in 2007 through the Tear Film and Ocular Surface Workshop, often called the DEWS Report, to a third anticipated in 2017 (TFOS DEWS II), which will assist in further refining clinical and research efforts. Concurrently, treatments have developed from over-the-counter topical lubricants to topical prescription drugs approved by the Food and Drug Administration (FDA), with many more in the development pipeline, ultimately resulting in greater treatment options for patients.