Highlights From *Cataract & Refractive Surgery Today*

In this new feature, the editors of Advanced Ocular Care *identify topics of interest to optometrists that are being discussed in the pages of our sister publications. Please visit www.crstoday.com for the full text of all of the stories in this installment.*

The March issue of *Cataract & Refractive Surgery Today* included a groups of articles on ocular health. Elizabeth Yeu, MD, wrote that two categories of patients with dry eye disease (DED) are particularly challenging to manage: patients who are extremely symptomatic but do not have many clinical signs, and the reverse, those with significant clinical signs but mild symptoms.

In her article she wrote that it is difficult to predict, based on demographics, patients who experience significant DED symptoms but few clinical signs. This individual is typically not the classic older patient such as a postmenopausal woman taking numerous medications. Often, younger patients and those postsurgery will present in this manner with significant symptoms but little in the way of conjunctival or corneal staining.

She stated that many of these patients will have a significant evaporative component to their DED. The eye care practitioner should evaluate the junction between the conjunctiva and the lid margins in DED patients, as it is important to assess for conjunctival chalasis (Figure).

DED cannot be easily identified by classic signs observed during a brief baseline examination using fluorescein staining. She recommended looking for devitalized cells with lissamine green (her preference) or rose Bengal. Flipping patients' lids can be very telling, she advised. Also, she wrote, it is crucial that clinicians assess the quality and quantity of the tear film's height. The eye should have a healthy tear film of about 1 mm that is smooth across the lower lid margin.

Treatment should include proper lid hygiene with scrubs and compresses, steps to ensure a healthy

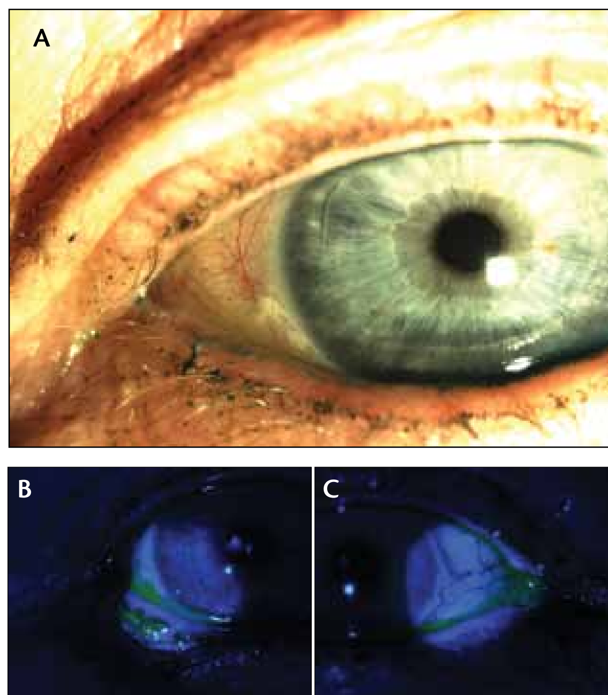

Figure. Slit-lamp photographs demonstrate the breakup and anterior migration of the tear film from the nasal and temporal conjunctival chalasis (A), resulting in an elevated central tear meniscus (B, C).

meibum, and therapy with cyclosporine ophthalmic emulsion 0.05% (Restasis; Allergan, Inc.). The latter anti-inflammatory agent works to prevent lid disease as well as treat the inflammatory cytokines that are causing DED.[1]

Regarding lid hygiene for anterior and/or posterior blepharitis, patients often require more than the daily warm compress and lid cleanser/scrub routine. If they are suspicious for *Demodex*, they require a tea tree oil shampoo or scrub for at least a month. For meibomian gland disease, some patients respond very well to topical azithromycin (AzaSite; Merck), Dr. Yeu wrote. Some patients unfortunately have little to no response to low-dose doxycycline. “For more recalcitrant posterior blepharitis, I have had success using oral azithromycin 500 mg daily, 3 days in a row, for 3 to 5 weeks and then using low-dose doxycycline and omega-3 fatty acids for maintenance.[2] This treatment is also effective for combating flare-ups of rosacea. Lastly, in-office meibomian gland expression techniques and devices may be useful.”

MANY SIGNS, FEW SYMPTOMS

Patients who present with many clinical signs and yet very few symptoms are typically older. These individuals, who will exhibit extensive staining, will often complain of suboptimal vision but have no foreign body sensation or pain. She wrote that it is imperative that these patients understand that the cause of their visual complaints is DED even if they are not sensing it. Older patients with this type of disease do not feel discomfort often due to various reasons, including age, medications that may be masking their symptoms as well as contributing to their DED, and a chronic hyperosmolar tear film with concentrated inflammatory cytokines leading to diminished corneal sensation and thus, a neuropathic component.

“I often treat this category of patients with aggressive preservative-free lubrication, cyclosporine, possibly punctal occlusion and go from there. These patients also need to optimize their environment, by eliminating air movement sources such as ceiling fan use. In counseling these patients, I explain that their condition is multifactorial, oftentimes a combination of aging, a side effect of their medications, chronic medical conditions, and their environment. I provide them with literature, and I outline that their treatment is not a one-time event. As with their other chronic conditions, DED requires long-term therapy.”

In her conclusion, Dr. Yeu wrote that a comprehensive clinical examination that includes a thorough history as well as the temporal nature of the patients’ symptoms, evaluating for causes of tear breakup, use of a few key tests such as lissamine green staining, everting the eyelids, and determining the height of the tear film, can go a long way toward ensuring optimal outcomes.

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1. Pflugfelder SC. Antiinflammatory therapy for dry eye. *Am J Ophthalmol*. 2004;137(2):337-342.
2. Igami TZ, Holzchuh R, Osaki TH, et al. Oral azithromycin for treatment of posterior blepharitis. *Cornea*. 2011;30(10):1145-1149.

The March issue of *CRST* also featured a comprehensive discussion of laser cataract surgery, including tips and tricks with the ground-breaking technology, steps to enhance phacoemulsification, reimbursement and financial issues, marketing the procedure, and patient flow. In Chief Medical Editor Eric Donnenfeld’s *Star Wars*-themed editorial for the issue, he wrote the following:

“There is definitive proof that laser cataract surgery has entered the mainstream. I do not rely on the literature, improvements in technology, the number of units in place, or the procedures performed to issue this declaration. Instead, I rely on a barometer dramatically more sensitive than any of these variables, the Perry factor. Henry Perry, MD, my senior partner, is arguably one of the leading cornea specialists in the country and also one of the most conservative. When I started doing Star Wars-like excimer laser photoablation 20 years ago, Hank offered me, a young Luke Skywalker (in my mind), Obi-Wan Kenobi-like wisdom when he firmly stated, ‘Do not be seduced by the dark side.’ He appreciated LASIK and PRK, but it was not for him then or now, and he encouraged me to continue to focus on the academic side of cornea, cataract, and refractive surgery and not only on LASIK and PRK. It was good advice.

“Fast forward 2 decades. We have had a femtosecond laser for cataract surgery at our surgery center for almost 2 years. Hank assiduously avoided the laser for the first year and then gingerly dipped his toe into the water. Today, he is performing almost half of his cataract cases with the laser and enjoying the technology. The other day he told me, ‘There is no doubt in my mind that this is a better way to perform cataract surgery.’ I rest my case, Yoda has spoken.” ■

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