



# Best Practices

in Integrated Care

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# Best Practices

in Integrated Care

This ongoing series, to be featured in each issue of *AOC* and its sister publication *CRST*, will clarify how eye care providers can best work together to provide patient-centered care of the highest quality possible.

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# COLLABORATIVE DRY EYE CARE FOR BETTER PATIENT OUTCOMES

Integrated care can help extend the reach of services for a prevalent and undertreated disease like DED.

**BY ELIZABETH YEU, MD, AND WALTER. O. WHITLEY, OD, MBA**



Because we work in a multispecialty tertiary referral practice, our entire model is based on collaborative care. Sharing insight and knowledge to positively affect patients' outcomes is at the core of our practice's philosophy. We offer a complete range of services

in medical and surgical ophthalmology—cornea, uveitis, oculoplastics, retina, and glaucoma—and the optometric staff is fully inte-

grated within those sections. We practice this way because it breeds efficiency while allowing us to attend to the complete needs of our patients. Our commitment to integrated care does not stop at our clinic doors: Our referral network is a large part of ensuring that patients achieve the best possible outcome.

Our dry eye services cross over into the various subspecialties we service and play a critical role in patient satisfaction and clinical outcomes. Dry eye disease (DED) is a hugely prevalent disease, affecting anywhere between 30% and 70% of the population.<sup>1,2</sup> Studies suggest that more than 50% of contact lens wearers have



Walt Whitley, OD

To see Dr. Whitley discuss integrated care in his practice, watch here: [eyetubeod.com/?v=umechelud](http://eyetubeod.com/?v=umechelud).



Elizabeth Yeu, MD

To see Dr. Yeu talk about the needs of an aging population, watch here: [eyetubeod.com/?v=inihedoso](http://eyetubeod.com/?v=inihedoso).

some degree of DED, and it is also prevalent in patients with diabetes.<sup>3,4</sup> The medications patients take (ie, systemic antihistamines) and the lifestyles they lead (ie, using smartphones and computers and performing other near vision tasks) are contributing risk factors for DED.<sup>5,6</sup>

The real disconnect we see in the clinic, however, is that for as prevalent and insidious as DED is (and by extension, meibomian gland dysfunction<sup>7</sup>), it is also a vastly underrecognized, underappreciated, and undertreated disease.

### DISCONNECT BETWEEN PREVALENCE AND AWARENESS

A study by William B. Trattler, MD, highlights the disconnect in prevalence and awareness of ocular surface disease (OSD) among referred patients.<sup>8</sup> In that study, only about 20% of patients had ever been told they had OSD, but more than 60% had an abnormal tear breakup time, and more than 75% were positive for fluorescein corneal staining. More than 30% described having experienced common symptoms of DED such as burning or stinging.

We strongly encourage referring eye care practitioners to treat the ocular surface prior to referral. In the setting of cataract or refractive surgery, OSD can cause irregularities in refractive measurements and IOL power calculations and in turn undermine the refractive outcome after the surgery. To provide optimal care for our patients, we need to start with a healthy ocular surface.

### COLLABORATIVE CARE SUCCESS

Three components should be in place for integrated care to be successful: (1) a commitment by the MD and the OD to the shared care of patients; (2) a point person to communicate with the network; and (3) constant and consistent communication. These elements help build trust, and integrated care is

ultimately a trust-based relationship.

A large part of working with our referral network is providing education. In fact, we would be remiss in our responsibility to our local community if we did not share the most up-to-date advances on dry eye care—from diagnostics to surgical to treatment and management—with our partner physicians. We encourage optometrists to practice to the highest level of their licensure, so we incorporate workshops for punctal plugs, understanding tear osmolarity, using InflammADry (Rapid Pathogen Screening), and how to create their own dry eye center in their practice. If we can help educate our peers, we will elevate patient care together. Educational efforts provide a benefit in establishing relationships and connecting with the community, building the trust our community partners need to feel comfortable referring their patients to us.

### DED AS A SECONDARY DIAGNOSIS

As mentioned, many patients have DED as a secondary diagnosis. Patients who use our retina and glaucoma services are screened for OSD using the Standard Patient Evaluation of Eye Dryness or SPEED questionnaire. Based on the results of that questionnaire, we may offer tear osmolarity testing. The treating specialist will manage the patient's primary concern but will also discuss with him or her the secondary diagnosis of DED. If that patient has an optometrist he or she is working with, we follow up to ensure they know about the patient's secondary DED. If called for, we can also treat the patient at our clinic.

Glaucoma patients being managed with topical therapy frequently have OSD exacerbated by preservatives that debride or dry the ocular surface. Perhaps less thought about but also of concern is that DED can be an issue for our retina patients as well. Epidemiologic surveys tell us that about 50% of individuals with diabetes exhibit signs and symptoms of DED.<sup>4</sup>

## INTEGRATED CARE FOR IMPROVED EFFICIENCY

Not all eye care providers are interested in treating DED. Having dry eye services in our comprehensive clinic allows each practitioner to focus on what he or she does best. In our experience, this model leads to better outcomes for patients.

Our dry eye center of excellence is a differentiator for our practice. In addition to staying current on research, we are active in clinical trials, and we tend to be early adopters of new technologies. There is also a financial benefit because of the efficiency afforded by an advanced degree of subspecialization.

## CONCLUSION

By treating DED to the highest level, we eye care providers can help patients achieve total eye health and the refractive and surgical outcome they desire. DED is prevalent in patients needing penetrating keratoplasty (60%), glaucoma surgery (78%), and blepharoplasty (26%).<sup>9</sup> Shared care is a way to extend our network of services, especially to those areas where access to care may be limited.

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# COMMONLY OVERLOOKED OCULAR SURFACE ISSUES

Dry eye affects patients of all ages. Catch it early to avoid dealing with a chronic, difficult-to-manage condition.

BY WILLIAM B. TRATTLER, MD



We all love to help patients with challenging conditions. One of the more difficult situations is treating patients who are very upset at their prior doctor. Although, these cases are not common, thankfully, they do require a detective mindset to understand what the patient's underlying condition is, what treatments were tried and failed, and what potential therapies may be able to save the day.

One of the more common scenarios in my practice is one in

which patients have been treated for dry eye disease (DED) or conjunctivitis, and weeks or months later they still have not experienced significant improvement. In these situations, it is important that I am successful at figuring out the condition and the optimal treatments. I recently saw a patient who was prescribed a topical steroid to treat conjunctivitis, which in turn led to irritation that was not addressed by his treating ophthalmologist after a few visits. This problem was somewhat compounded by the fact that the patient also had fairly significant blepharitis that was not treated. In this scenario, I am not only managing the ocular surface issue, I

am also trying to salvage the integrity of another doctor (who in this case did his best) but who prescribed treatment that did not address the underlying condition (blepharitis), which was a major part of the patient's symptoms.

### **“WHEN YOU HEAR HOOFBEATS ...”**

When thinking about optimizing the ocular surface prior to referral, I feel it is important to carefully explore the differential diagnosis to delineate disease features that narrow it down. When a patient comes into the office with complaints of ocular irritation and redness, it is prudent to be vigilant about ocular surface disease (OSD), whether it is DED or blepharitis or something else that is exacerbating the condition, especially if the patient has not responded to previous management efforts. For example, viral conjunctivitis rarely lasts more than 2 weeks; if the condition has been present for longer, it is likely not pink eye. It is likely some other condition, especially if there are no corneal infiltrates.

Fortunately, we can be guided by an expanding array of tools in our armamentarium designed to help us understand the relative health of the ocular surface. That said, a careful and meticulous ocular surface evaluation is still the essential starting point for narrowing the differential. When I am evaluating patients with ocular surface disease, one of the first things I want to figure out is whether the underlying cause is aqueous deficiency, poor tear film quality, or some combination of both. I carefully evaluate the lids and lashes. If there is scurf present, or if I press on the oil glands but there is not much expression, I can feel pretty confident that blepharitis is contributing to the condition. On the other hand, if the lids look healthy and the secretions are of good quality, then aqueous-deficient disease is more likely.

### **COMMONLY OVERLOOKED CONDITIONS**

One of the conditions that I frequently see missed in patients, especially those of advanced age, is conjunctival chalasis. With this condition, patients can have coexisting DED or blepharitis, but the inferior conjunctiva is corrugated and not smooth.

DED is also commonly missed among patients referred to my practice, despite its being extremely prevalent in the general population.<sup>1</sup> Recognizing and addressing DED is critical for patients being referred for cataract or refractive surgery. There is a growing appreciation, however, that DED does not discriminate against younger patients. Patients of high school, college, and graduate school age are prone to significant DED from staring at the computer (computer vision syndrome). DED is often missed by practitioners due to misconceptions about patient demographics.

Treating DED before cataract surgery is vitally important because of the implications of how the condition can affect keratometry readings and IOL power calculations. As well, untreated OSD prior to surgery can lead to postoperative blurry vision and dissatisfaction

**“ DED is a progressive disease. That means that it will likely be more symptomatic and advanced in older patients—and more advanced disease is harder to treat.**

with the outcome. As we learned in the PHACO study,<sup>1</sup> about 80% of patients referred for cataract surgery have some degree of DED signs, but most of the patients in the study did not have ocular irritation or pain. Instead, the main complaint we encountered in the study (and what we see in clinical practice) is visual disturbances, meaning patients are minimally symptomatic or symptom free as far as discomfort. Cataract patients have visual symptoms due to the opacified lens, and “visual disturbances” is a vague complaint regardless. Identifying and treating DED in cataract patients makes a difference in the patient's visual outcomes with surgery.

Another thing to keep in mind is that DED is a progressive disease. That means that it will likely be more symptomatic and advanced in older patients—and more advanced disease is harder to treat. Something I like to share with colleagues when talking about DED is that if a patient has OSD and he or she is using artificial tears and still having symptoms, then there is a clear need to increase therapeutic treatment.

### **DIAGNOSIS AND MANAGEMENT**

There are a number of very effective therapies available for treating DED, but at the current time, cyclosporine ophthalmic solution 0.05% (Restasis; Allergan) remains a mainstay. I often start patients on topical steroids when I initiate cyclosporine as it helps speed improvement. Emerging evidence supports the use of triglyceride omega-3s for improving the health of the meibomian glands. Treatments such as LipiFlow<sup>2</sup> (TearScience), BlephEx (RySurg), and the lid cleanser Avenova<sup>3</sup> (NovaBay Pharmaceuticals) have a solid track record of success for treating meibomian gland dysfunction. Beyond these options, and in addition to the wide array of artificial tears on the market, punctal plugs are an in-office procedure that can dramatically improve patients' ocular comfort.

From a diagnostic standpoint, LipiView 2 (TearScience) is a promising technology for understanding the structure of



the meibomian glands, and InflammaDry (Rapid Pathogen Screening) and TearLab Osmolarity Test (TearLab) are potential diagnostic devices for helping assess patients with OSD.

### CONCLUSION

As sophisticated as the dry eye marketplace has become, however, diagnosis and management really begins with awareness and education. DED is easy to overlook, so it is in our patient's best interest for practitioners to be increasingly vigilant. Identifying and treating OSD, at the end of the day, will provide both short-term and long term improvement in quality of vision and/or comfort to our patients.

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# DRY EYE DISEASE: OPTOMETRY'S IMPORTANT ROLE IN THE MANAGEMENT OF OSD

As optometrists, our role is to manage the ocular surface to every extent possible.

BY LESLIE E. O'DELL, OD



Even though I have been lecturing about integrated care for years now, and despite the fact that I have been treating patients in shared care situations for the better part of my career, I had a revelatory moment recently when I realized just how important a role optometry plays in the outcome of patients when it comes to dry eye disease (DED).

That thought may come as a surprise to those who know me, because it is literally the logical conclusion of all the DED educating I do. And yet, as I thought recently about the opportunity optometrists have to treat and care for ocular surface disease (OSD) among their patients—and especially those being referred

for surgeries—it really struck me that we play an important role in the outcome of patients. Integrated care really is about more than just practicing efficiently and ensuring that needed vision services extend to populations with low densities of eye care providers; it is also about functioning as part of a team in the continuum of patients' care to maximize the ability to achieve the best outcome.

That is really just a lot of words to say that all eye care providers—optometrists and ophthalmologists—are working toward a common goal: the best outcomes for their patients. As optometrists, our role is to manage the ocular surface to every extent possible to allow the surgeons to be able to do their job and help patients achieve their refractive goals.

## THE CONTINUUM OF CARE

Every ophthalmic surgery and procedure—from cataract surgery to blepharoplasty to glaucoma treatment to antivascular endothelial growth factor injections for age-related macular degeneration to corneal-based surgeries such as PRK and LASIK—disrupts the ocular surface. And so the first thing for optometrists to realize is that integrated care does not just involve the typical cases, such as cataract and refractive surgery. In today's environment, patients desire refractive-like outcomes, regardless of the procedure they are undergoing. Quite frankly, with the kinds of diagnostic modalities and treatment options we have at our disposal, it is most often possible to optimize the ocular surface prior to ocular surgery such that patients have the best chance of hitting their postprocedure refractive target—and leaving the OR with better visual potential than when they went in.

Perhaps the most important aspect of managing OSD is taking time with patients, to evaluate the situation thoroughly and also to explain and educate about the need for vigilance with the care routine. OSD may be a prevalent and chronic condition, but many patients (and even care providers) mistakenly misconstrue it as “not a real disease.”

Our surgical partners sometimes do not have the time needed to manage OSD, and, therefore, optometrists are helping both the patient and the rest of the members of the patient's care team when they fill the void for this needed service. The primary benefit is that patients receive a better chance to have a good outcome, however, integrated care also allows ophthalmologists to see more surgical patients and optometrists to play a vital role in outcomes. It is truly a win-win-win scenario for patients, the providers involved, and our respective professions.

## PATIENT EVALUATION: KEY PRINCIPLES

A recent study by Trattler et al showed that many patients who present for cataract evaluation have asymptomatic OSD.<sup>1</sup> The danger here is that missed OSD can affect the accuracy of biometry readings, lead to improper IOL calculations, and affect the vision postoperatively. Treating the ocular surface preoperatively is a time saver, and it also limits the potential that patients will suffer from ocular discomfort, vision fluctuations due to decreased tear breakup time, and increased inflammation during the postoperative period.

A good place to start with patients being referred for surgery is a thorough and careful evaluation of the ocular surface, regardless of the surgical indication. The conversation should include ample education to the patient about his or her condition. Education is especially crucial for patients with subtle disease features and less obvious symptoms. Optometrists should understand that referring a patient with poorly controlled OSD slows down the process and undermines the patient's goal of achieving an optimal outcome.

This question of quality care delivery is a two-way street. As much as the optometrist should ensure his or her best efforts on behalf of the patient, careful consideration should be given to the referral source. A patient should only be passed along if the OD is confident that the patient will have a good experience and a great outcome.

Another aspect of the presurgical workup that will help both the optometrist and the ophthalmologist involved (and also benefit the patient) is to properly manage expectations. Addressing concerns before referral and, more importantly, prior to surgery, makes for better outcomes. Managing expectations is something all cataract surgeons understand, in particular for patients opting to receive multifocal IOLs.

As for specific tests and diagnostics, I believe that tear osmolarity (TearLab) and InflammDry (Rapid Pathogen Screening) are great tools that offer definitive information regarding patients' OSD and also increase practice revenue. One caveat, however, is that these tests are variable, like intraocular pressure, and thus should be repeated at follow-up examinations to help guide treatment. However, the work-up need not be overly complicated; the SPEED or Standard Patient Evaluation of Eye Dryness questionnaire is great for identifying patients in need of greater attention. As well, the slit-lamp examination with vital dyes is still a mainstay of the evaluation. Treatment can still prove to be a challenge. Many patients have combined disease with an aqueous deficiency and evaporative component. Allergies can further complicate the scenario. There is no one-size-fits-all approach for a DED patient.

## CONCLUSION

When we take on the care of a patient, he or she is entrusting his or her vision to our abilities. It is not different in integrated care settings, and in fact, there may be added responsibilities from the nature of the relationship. As optometrists, we owe it to patients to set them up for successful surgeries, but we also owe it to our surgical colleagues to allow them the time they need to do what they do best. Meticulously caring for the ocular surface in all patients being referred for surgery will go a long way toward engendering trust from patients and other providers, and, as an ancillary benefit, will help differentiate your practice and add to your reputation and bottom line. ■

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