

Building Your Practice by Treating Chronic Dry Eye Disease

Ocular surface disease can be a lucrative subspecialty. Learn how to effectively diagnose, treat and follow up with patients to boost revenues and grow your practice.

Dry eye disease can seem like an inconvenience — a barrier that delays our contact lens and surgical recommendations and often causes complications. But in both clinical and financial terms, that inconvenience is actually a phenomenal opportunity for us to increase revenues, boost the medical portion of our billing, improve our patients' health and enrich our profession.

Growth opportunity

Optometry has its financial challenges, and practitioners sometimes respond by trying to see more patients. However, if you offer additional subspecialty services, you can boost profits without sacrificing your values and energies.

Ocular surface disease is a good place to start, in part because of its potential patient volume. With 78 million Americans expected to be enrolled in Medicare by 2011 — about 40 million of them women — you can expect that about 15% will have dry eye symptoms, according to the National Eye Institute.

Dry eye disease has unique revenue potential due to multiple patient visits. The medical model for comprehensive dry eye treatment includes a screening questionnaire, oral and topical therapies and often punctal occlusion.

Patients usually require two to eight visits plus punctal occlusion for net revenue averaging between \$450 and \$550 per patient. If you see 50 to 55 patients each week, seven to eight will have dry eye symptoms. Even if only half of those want therapy, the cost per patient could add up to \$67,500 to \$110,000 in added annual revenue.

Screening and education

To identify potential dry eye patients, I ask people to fill out a quick tear-function questionnaire.¹ If they have dry eye symptoms, I refer to their problem as chronic dry eye disease or ocular surface disease, rather than dry eye. Patients respond differently, and it frames the problem as a disease in their minds. I explain tear film composition so patients understand

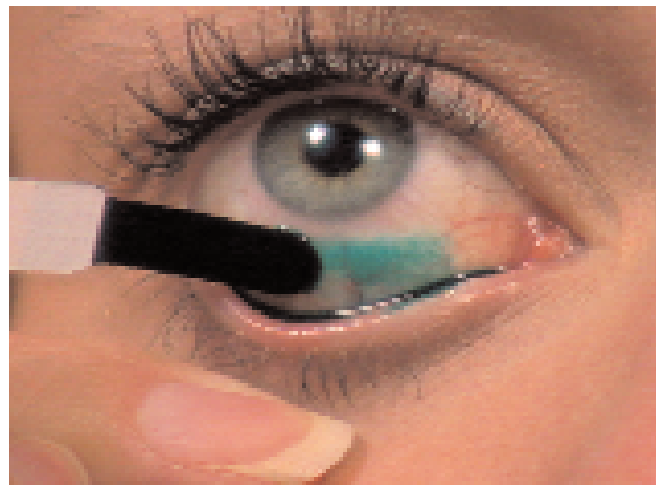
we're dealing with issues of tear quality and tear quantity. Then, I schedule another appointment for further testing.

The best candidates for dry eye evaluations are patients who use artificial tears more than three times a day, experience discomfort with contact lens wear, which leads to decreased wearing times, or those who are considering ocular surgery.

Ocular surface disease testing

While performing the following testing protocol, I educate the patient at each step.

1. Evaluate the tear meniscus. A patient's tear meniscus should be 0.3 mm to 0.4 mm. You can evaluate it with a small



The lissamine green test reveals dead cells on the ocular surface, validating the irritating symptoms associated with dry eye disease.

circular beam. I tell patients, "I'm looking at the volume of tears on your eye to determine whether it correlates with your symptoms." (I use the Schirmer's test only when required by insurance companies.)

2. Test tear breakup time. Fluorescein testing will determine the speed of tear film breakup. I say, "Normal is 10 seconds, and your tears are breaking up quicker, which indicates



a problem with the mucin layer.”

3. Evaluate cell health. Lissamine green testing will show the devitalized cells on the ocular surface, which is a great validation of symptoms reported on the questionnaire.¹

4. Express the meibomian glands. I explain to patients that without the oil layer, tears evaporate very quickly. The secretions appear milky when inflammation has reached the meibomian glands.

Therapeutic goals

Once I've completed testing, my goals are to decrease lacrimal gland and surface inflammation, normalize the tear film, stimulate epithelial healing and restore normal neural feedback to the lacrimal gland.

When blepharitis is present, I treat it first. I recommend mild lid hygiene and warm compresses, and sometimes an antibiotic ointment. If meibomian gland dysfunction is present, I use omega-3 and omega-6 fatty acid supplements and, perhaps, oral doxycycline. I give clear, written instructions for each treatment modality. Follow-up care and any changes will take multiple visits and vary depending on the aggressiveness of treatment.

To decrease tear and surface inflammation, you can use cyclosporine ophthalmic emulsion 0.05% (Restasis) b.i.d. and a soft steroid, such as loteprednol (Lotemax), q.i.d. for 2 to 4 weeks. Loteprednol decreases inflammation immediately, which the patient can feel, and facilitates the long-term success of cyclosporine. I bring patients back in 6 weeks to determine the therapy's effect and discuss punctal occlusion. I tell patients, “We've improved the quality of your tears, now we want to improve the quantity with punctal occlusion.”

Punctal occlusion

Often, there is confusion about when to use punctal occlusion and drug therapy. I've found that treatment is most effective when you improve the quality of the tears with oral and topical therapies before increasing the tear quantity with punctal occlusion. I find myself using punctal occlusion more than ever, as a result of comprehensive therapy, typically in combination with cyclosporine. In a recent study,² Calvin Roberts, M.D., verified this approach when he demonstrated that using cyclosporine and punctal occlusion together was more effective than either therapy alone.¹

Our practice prefers external (surface) plugs because they're easy to assess, observe and remove if necessary. I evaluated several brands for cost effectiveness, ease of inser-



A punctal plug is inserted to improve the quantity of this patient's tears. External plugs are easy to observe and remove if necessary.

tion and retention. The Parasol Punctal Occluder by Odyssey came out on top. The plugs are easy to use and have the best retention, with a pop-out guarantee. They're also cost-effective, in part because approximately 95% of patients can be accommodated by either the small or medium sizes, which help keep your inventory low. They're available in sterile preloaded, sterile bulk or nonsterile bulk packs.

Document, document, document

Another aspect of managing dry eye disease successfully is careful documentation throughout the process. Documentation is part of the dry eye disease subspecialty model that can increase revenue, boost profits and truly change the health of your patients and your practice.

Dr. Devries is cofounder of Eye Care Associates of Nevada, a medical/surgical comanagement referral practice.

References

1. www.OdysseyMed.com for reprints and photos. Last accessed 1/31/07.
2. Roberts C. Comparison of topical cyclosporine, punctal occlusion, and a combination for the treatment of dry eye. *Optom Vis Sci.* 2005;82:E-abstract 050070.

