

TREATING DRY EYE IN WOMEN

Signs may precede symptoms, so be proactive in diagnosing DED.

BY WHITNEY HAUSER, OD



Women are at higher risk than men for dry eye disease (DED), especially as they age.¹ Perimenopausal women are perhaps one of the most underevaluated groups regarding DED. Although diagnostic changes may be present, these women are often not highly symptomatic. Beginning a conversation with patients as they reach their middle to late

40s presents an opportunity to catch the disease early and begin treatment before symptoms increase with age. Studies have shown that the prevalence of DED in women over age 50 years is nearly double that of men in the same age group. This is likely due, in part, to hormonal changes²⁻⁴ and other components typically unique to women such as cosmetic application and hormone therapy.⁵

ROLE OF COSMETICS

It is important to pay attention to the toxins found in many cosmetics, but the location in which those cosmetics are applied can also make a significant difference in the severity of dry eye. Unfortunately, a popular location to apply eyeliner is the waterline of the lid. When cosmetics are caked atop the meibomian glands, the natural oils that should be released with each blink are blocked. This is a problem that must be addressed with patients, but it should be done tactfully. Cosmetics, preferred brands, and application practices are typically subjects about which women feel strongly, so the topic should be broached in a diplomatic way without being accusatory.

I have found that the best way to illustrate concerns is with photos of the patient's anterior segment and meibomian glands. Showing what the cosmetics are doing to the eye opens the conversation, and suggested changes can then be discussed. Letting the course of the conversation be determined by the severity of the problem and introducing changes incrementally will boost compliance. If the patient is asymptomatic, discussing application changes—applying eyeliner at the lash line rather than the waterline, for example—is a good place to begin, rather than suggesting product changes right away. If the patient's condition is more severe, product changes may have to be introduced earlier.

TIERED TREATMENT

I determine the severity and the type of DED present by evaluating tear osmolarity, checking for the matrix metal-

loproteinase-9 (MMP-9) marker with InflammDry (Rapid Pathogen Screening), and measuring blink performance and meibography with LipiView (TearScience). I also perform lissamine green staining to highlight conjunctival dryness. Many doctors use only fluorescein, which highlights corneal staining, but lissamine green is more suited to assessing the conjunctiva. In my opinion, the use of lissamine green to look for conjunctival staining, which tends to precede corneal staining, is a practice differentiator. Not only does it detect DED sooner in many cases, but it also provides a much better indication of progression.

My treatment plan is largely based on the patient's eagerness to engage, the level of the patient's discomfort, and the clinical signs present. Most patients appreciate an incremental approach. Prescribing too many components at once can be discouraging if patients have difficulty maintaining the regimen. Starting with a manageable foundation and adding medications as needed helps avoid patient frustration and ensure that patients are as compliant as possible.

Many patients have already tried several types of artificial tear before presenting to the office.⁶ In patients for whom a tear is appropriate, I make certain they are using the most suitable type for their condition, such as a lipid-based tear for evaporative DED. It is also prudent to be mindful of preservatives.

Nutraceuticals are another first line treatment that is typically well received. HydroEye (ScienceBased Health), in particular, is beneficial as it includes the antiinflammatory gamma-linolenic acid (GLA), a plant-based omega-6 fatty



Women, especially perimenopausal women, are at heightened risk for dry eye disease. This is an underserved population that optometrists should not ignore.

acid found in black currant seed oil. The combination of the omega-3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) has proven highly effective in relieving dry eye.⁷⁻¹⁰ This combination has been shown to relieve symptoms and to result in clinically significant changes in inflammatory markers and improvement in ocular smoothness, specifically in postmenopausal patients.¹¹

If further therapies are needed, we move to other methods to treat gland dysfunction, such performing lid hygiene with BlephEx (Rysurg) or using a silicone-beaded mask. Cyclosporine ophthalmic emulsion 0.05% (Restasis, Allergan) or lifitegrast ophthalmic solution 5% (Xiidra, Shire) can also be added to address the inflammatory origin of dry eye disease.

Lipiflow (TearScience) treatment or intense pulsed light (IPL) therapy may be appropriate to further eliminate obstruction and telangiectasia at the lid margin. Punctal plugs are an option as well, although these are best utilized once inflammation is controlled or eliminated. I prefer a long-term dissolvable plug such as Comfortear Lacrisolve 180 Absorbable Punctum Plugs (Paragon BioTeck).

Although it has been documented that DED affects approximately 3.2 million women in the United States,¹ there are likely millions more.¹² We have the opportunity to affect a positive change in quality of life for a vast number of patients. Care should be taken to address the unique concerns and circumstances of the patients in this group, and perimenopausal women should not be overlooked. The earlier symptoms are detected, the better the outcomes will be. ■

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