

FIVE SIGNS IT'S NOT JUST DRY EYE



Be careful not to dismiss these other reasons your patient may be experiencing ocular surface discomfort.

BY EMILY L. HUTCHINS, OD

Dry eye disease (DED) may be one of the biggest ocular diagnostic scapegoats of all time. DED is a unique, multifactorial condition that can not only lead eye care providers to overdiagnose patients, but also to underdiagnose them. Red eyes, foreign body sensation, excessive tearing, and blurry vision are all symptoms of DED, but they can also indicate other conditions, and it's important to be able to tell the difference.

Mistaking symptoms of other conditions for those of DED can be frustrating for both the patient and the managing clinician—especially if there is no symptomatic improvement with maximum dry eye therapy.

In this article, I'll review five important findings that tell you there may be more going on than DED.



BINOCULAR VISION

Many symptoms associated with binocular vision problems and DED overlap, including intermittent or constant blurry vision, diplopia, visual fatigue, and discomfort.¹ If your patient is complaining of these symptoms but shows little to no ocular surface findings, be sure to perform a cover test and vergence assessment. There may be an underlying binocular issue, such as a decompensating phoria. In these cases, adding prism

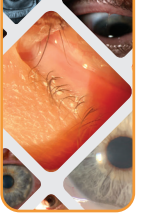
to the patient's glasses prescription or referring them for vision therapy may be imperative.



EYELID AND EYELASH ABNORMALITIES

Eyelids serve as the primary defenders of the ocular surface. For this reason, it is important to evaluate lid seal, laxity, and position in all patients with dry eye. Various eyelid abnormalities, including nocturnal lagophthalmos, facial paralysis, age-related lid laxity, thyroid eye disease, entropion, ectropion, and floppy eyelid syndrome can cause improper eyelid closure and lead to poor protection of the ocular surface. If the eyelids are not properly guarding the ocular surface from the environment, symptoms of DED will continue despite efforts to provide the best dry eye therapy. In such cases, surgical intervention by an oculoplastic specialist may be necessary for symptomatic improvement.

Punctal stenosis is another common eyelid abnormality. Patients with punctal stenosis will likely experience epiphora and ocular discomfort, similar to patients with dry eye.² Careful evaluation of the punctal openings should be performed in all cases of epiphora. Once again, referral to an oculoplastic specialist



for consideration of surgical intervention is essential for these patients.

Trichiasis may also be the culprit of ocular surface irritation. Misdirected lashes might scratch both the corneal and conjunctival tissues during blinks. If lubrication does not provide relief, epilation should be considered.

Eyelid and eyelash health is critical in evaluations of ocular discomfort—don't bypass them during your slit-lamp examination. Be sure to fully evaluate all four eyelids to confirm there is no anatomic or mechanical abnormality causing the discomfort.



MISUSE OF COSMETIC PRODUCTS OR PROCEDURES

The US cosmetic industry is massive. Eyelash extensions, eyelash tinting, mascara, eyeliner, glitter eyeshadow—the list of cosmetic procedures and products for use around the eyes goes on. Questioning your patients about the different products they use and how they use them is worthwhile and may shed light on whether cosmetics could be the perpetrator of their DED symptoms. In some cases, cosmetics can singlehandedly be the cause of lipid layer disruption, and symptoms often subside with discontinuation or modified use of the product alone.

The location of makeup application

is also important to consider. A study conducted at the University of Waterloo examined, recorded, and quantified the migration of glitter from a cosmetic eye pencil into the tear film when applied in two different locations: behind the lash line and anterior to the lash line. The study concluded that “pencil eyeliner migrates most readily and maximally contaminates the tear film when applied posterior to the lash line.”³ Ideally, patients should avoid application of eyeliner and other makeup products posterior to the lash line (ie, on the waterline). In addition, the type of makeup can make a large difference in a patient's symptoms. Cream or liquid-based products have a smaller chance of

migrating to the ocular surface than powders or pencils because there is less flaking of the makeup pigment.

Reminding your makeup-wearing patients to fully remove all cosmetic products, such as eyeliner, mascara, eyeshadow, and foundation before they go to bed is imperative. The mechanical rubbing of eyelids against pillows can further aid in cosmetic particle migration to the ocular surface, where patients will continue to cause irritation and potentially lead to clogged oil glands. Makeup removal is best achieved with baby shampoo or an OTC makeup remover specifically formulated as a lid scrub.



CONJUNCTIVOCHALASIS

Conjunctivochalasis is a common problem that mechanically irritates the ocular surface and contributes to inflammation. This condition will appear as loose, redundant tissue of the bulbar conjunctiva. The prevalence of conjunctivochalasis increases with age and is one of the most common comorbidities with DED.⁴ Adding lubrication may help in mild cases, but if conjunctivochalasis is significant, surgical excision of the extra tissue may deliver the most dramatic relief.

AT A GLANCE

- ▶ Red eyes, foreign body sensation, excessive tearing, and blurry vision are all symptoms of dry eye that can also indicate other conditions.
- ▶ Thygeson superficial punctate keratitis is an important diagnosis of exclusion to keep in mind if a patient complains of photophobia and foreign body sensation.
- ▶ The prevalence of conjunctivochalasis increases with age and is one of the most common comorbidities with DED.

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WHITISH-GRAY CORNEAL LESIONS

Although an uncommon condition, Thygeson superficial punctate keratitis (TSPK) is an important diagnosis of exclusion to keep in mind if you have a patient complaining of photophobia and foreign body sensation. The etiology of this condition is still largely unknown. Some reports have suggested a viral link,⁵ and others have suggested a possible association with the gene *HLA-DR3*.⁶

Most TSPK cases present with five to 30 bilateral, although possibly asymmetric, punctate intraepithelial lesions located on the paraxial cornea. These lesions have been described as white or gray in color, breadcrumb-like or granular in appearance, and may stain with fluorescein. A

hallmark of this condition is its propensity to recur frequently over the course of many years.

The treatment of choice for TSPK is topical steroids because they have been shown to reduce both signs and symptoms, whereas artificial tears and bandage contact lenses alleviate only discomfort.⁷ Steroids are typically tapered over the course of several weeks to months. Topical cyclosporine has also been reported as a successful treatment option.⁸

KEEP AN OPEN MIND

This article is not an exhaustive guide to dry eye masqueraders and co-conspirators, but it may serve as a helpful reminder to evaluate binocularity, eyelid health, cosmetic practices, conjunctival health, and corneal tissues carefully. Doing so should help alleviate some

frustrations and lead to more successful outcomes for you and your patients with symptoms of DED. ■

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