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Improving contact lens comfort through dry eye management

One of the top reasons patients drop out of contact lens use is due to discomfort and fluctuating vision. Quite often these symptoms have little to do with the contact lens, but are related to undiagnosed dry eye syndrome in patient's that are asymptomatic when they are not utilizing contact lenses.

This can represent a challenge for even the most astute clinician. As these patients are unaware, they have an underlying problem that will be aggravated as soon as a contact lens is introduced into the anterior surface. From the patient's perspective they obviously attribute the issue to the contact lenses or their inability to effectively use contact lenses due to their "stubborn eyes."

This represents a great opportunity to gain the confidence of new and existing patients and become a great practice builder.

The first key to success is to properly diagnose the patient with the underlying dry eye condition prior to fitting contact lenses to their eye. In our office we survey the patients for any symptoms of dry eye disease prior to the exam. During the exam we search for blepharitis, ocular allergies, conjunctival and corneal staining, pinguecula, pterygium, and low tear volumes.

Once this assessment is completed, the findings are discussed with the patient and the impact they can have on dry eyes. If the findings are minor, then the goal is mainly to appropriately set the patient's expectations so that they understand they have a dry eye condition prior to being fit with contact lenses. This is crucial for the patient to understand because if the contact lens aggravates the pre-existing condition, they will not blame the contact lenses or the doctor. Instead, they will have their dry eye condition effectively treated.

There are more of these sub-threshold patients than a doctor would expect. Most patients often report to me that no doctor has ever found this or taken the time to address the condition. Taking the time to treat the patient properly will bond them to your practice long term and allow them to utilize their contact lenses long term with optimal comfort.

The second key is to proactively treat the patient. If during the exam the patient has signs of allergies, then start them on a mast cell stabilizer/antihistamine to bring down any inflammation that could be starting to disrupt the tear film. Once patients begin contact lens wear, we prescribe a preservative free artificial tear. Why do we do this?

The mechanism for the contact lens to aggravate the dry eye condition occurs when the contact lens dehydrates and begins pulling the patient's natural tears from their eyes in order to rehydrate itself. This is where the problem really begins. Usually, this will cause damage to goblet cells and the corneal epithelium over time, which can be seen at the post-contact lens fitting follow up when using sodium fluorescein staining. More often than not, the use of an artificial tear is not nearly enough, and patient compliance can be low. This is aggravated even further by the long hours' patients spend staring at computer monitors and tablets.

In these cases, the best way to treat these patients is to increase their tear volume utilizing punctal occlusion. This allows patient to have a large volume of their own natural tears so that the contact lens and the anterior surface of the eye is less prone to dehydrate and dry out.

In our office, we assess the nasal region of the eye to ensure there are no signs of chemosis from allergies. If it is minimal or none, then we normally will insert a **Lacrivera VeraPlug™ FlexFit™** silicone plug. These are easy to insert in the lower puncta and effectively elevate the tear volume. In patients that have mild chemosis in the nasal region, where we think a silicone plug could irritate the conjunctiva in this area, we reach for the **Vera90™ Synthetic Extended Insert** or the **Vera180™ Synthetic Absorbable Lacrimal Plug**. All can be effective in treating these patients and preventing them from becoming contact lens intolerant or dropping out completely. Not only is this a great practice builder for an office, but patients will also be very happy with the improved comfort of their contact lenses and the increased stability in the clarity of their vision.



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