

Tear Osmolarity Testing and the Contact Lens Patient

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Tear osmolarity testing can be a great asset for your contact lens practice. The dropout rate due to discomfort and dry eye is appalling. In my practice we are using tear osmolarity testing to help keep my patients in contact lenses. I have found testing those contact lens patients who are having discomfort and dryness helps determine the course of treatment. If a patient is found to have an osmolarity reading over 300 or a difference between the eyes greater than 8 I know there is a problem.

All of us in practice are facing this problem every day. The question is what to do? Do we change the patient's solution? Do we change the lens material? Do we change the wearing schedule? Do we do

some or all of these? Once we make the change how do we determine if it is successful?

Getting our patients to comply with our recommendations is very challenging. We make the recommendation and hope the patient will follow our advice, but it will help the patient to have some type of measurable difference to show that our recommendations are making a difference. This is where TearLab comes into play in my practice. When I find a patient who is experiencing discomfort and dryness with their contact lenses I take the measurement with their lenses on and then I make my recommendations. When the patient returns to my office I will retake the osmolarity measurement. I typically will see a decrease in the reading or more equal readings between the two eyes. I now have concrete information to give the patient on how the new treatment has improved their problem.

This is an excellent way to show how a change from monthly lenses to a daily modality can help the patient. For instance taking a patient out of a low cost two week lens and recommending a lens like TOTAL DAILIES1®, the patient may not want to make the change due to cost. If you can show them a measurable difference with the osmolarity reading, they are much more likely to accept the recommendation. The same can be true if you are prescribing medication such as Restasis. Showing the patient there is measurable improvement will more than likely insure adherence to the treatment.

Tear osmolarity is a valuable measurement in the diagnosis and treatment of dry eye disease (DED). It is also a very valuable asset in helping patient compliance in contact lens care. I have found this to be a great asset in my practice in keeping my patients in their contact lenses as well as adhering to my recommendations. My patients have more confidence in me and end up becoming more bonded to my practice as well as becoming great referral sources.

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