

Contact Lens Update

CLINICAL INSIGHTS BASED IN CURRENT RESEARCH

Meibomian gland dysfunction and *Demodex*: A tale of two mentors

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A mentor is a more experienced/knowledgeable person that helps to guide a less experienced/knowledgeable person. I would like to share stories about two of my mentors, past and present.

Almost 30 years ago, when I was an instructor at the Southern California College of Optometry (now Marshall B. Ketchum University) I was fortunate enough to be mentored by one of the contact lens faculty “hotshots”, a young OD named Jerry Paugh. One day, Jerry burst into my office asking, “why are the students expressing meibomian glands?” I explained to him it was a technique I picked up from David Bright of Veterans Affairs. After a heated discussion over the merits of meibomian gland expression, Jerry decided we needed to collaborate on a student research project that ultimately resulted in a meibomian gland dysfunction (MGD) prevalence paper.¹

Today, it is believed that MGD is the primary culprit behind many complaints of dry eye.^{2,3} Years ago, we were almost ashamed to publish data showing that 38.9% of our clinical population had MGD. But in the light of current research, I guess it was not that far off. Today, our current classification of dry eye into evaporative and aqueous deficient have been called into question. As dry eye progresses, the thinking is that both classifications merge. Later stage aqueous deficient dry eye also includes MGD. Later stage MGD includes aqueous deficiency. The classes are meaningless because they become virtually indistinguishable.

Just a few years ago, our treatment options were limited to lid therapy comprising warm compresses and lid scrubs, often of a “home-made” nature. Now, we have all kinds of commercial treatments available for MGD that we did not have just a few years ago. These include moist-heat masks such as the Bruder mask, off-label use of topical drops such as AzaSite,^{4,5} lid-warming devices such as LipiFlow⁶⁻¹⁰ or Miboflo, etc. with more coming in the future. I guess the new challenge is when to use which treatment for what situation.

My second mentor is really a case of reverse mentoring. Recently, I was asked by Mark Risher of Allergan Inc. to offer Key Opinion Leader guidance to Scott Schachter, a promising OD from Pismo Beach, California. Things got turned around on an organized bike ride we both happened to be riding in. For about six hours, Scott shared fascinating stories about patients who displayed demodex infestation. I was mesmerized. Right after the ride, I purchased an LED microscope and started to epilate patients who I suspected of having demodex.^{11,12} I texted pictures to Scott and he gave me constant tutoring and encouragement in real time. Fortunately for our patients, we have some treatments such as tea tree oil, available for this common parasite.¹²⁻¹⁶

After I got my feet wet, I was both happy and sad. I was happy, because I could now figure out many of those unsolved clinical mysteries. But also sad, in that I missed it in the past due to just plain unawareness. The mite is so prevalent it is almost embarrassing to miss it. I firmly believe if you are seeing rosacea or blepharitis patients in your clinical practice and do not see demodex, you are missing it. Guaranteed.

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