

On Hope and Skepticism

Skepticism and hope. In medicine and in life, I believe these two things are not mutually exclusive but rather are useful postures in their own rights. I recently returned from the ESCRS meeting in London. I have had the pleasure of attending this conference for 5 of the last 6 years. Among this year's presentations, I again found technologies that invited skepticism or hope. Here are two notable examples.

Curiously, the European community has not yet embraced accommodating IOLs. In the US, the FDA-approved option of the Crystalens accommodating IOL (Eyeonics, Inc., Aliso Viejo, CA) continues to gain in popularity. Many of my patients have become free or nearly free of spectacles with this technology (I disclose that I have been involved in FDA studies and ongoing research with the Crystalens and have been compensated for research overhead). I cannot explain why European surgeons are suspicious of a technology about which a cohort of US practitioners is hopeful. In time, however, the overall benefit of this modality to ophthalmic care will be clear.

My personal dichotomy regarded corneal collagen cross-linkage. The single biggest challenge currently for corneal laser refractive surgery is the issue of patient selection to avoid ectasia. Despite our best efforts, a person whose eyes seem totally normal today could go on to develop ectasia, even without surgery. When someone develops ectasia after refractive surgery, all

involved suffer. Today's treatment options are limited—rigid contact lenses or a penetrating keratoplasty—but there may be hope. I have sat skeptically on the sidelines reading and listening about corneal collagen cross-linkage for an ectatic corneal diagnosis. The nonsurgical treatment aims to slow or even stop progressive corneal thinning and to improve the biomechanical strength of the cornea. There are now 6-year data available. One company, Peschke Meditrade GmbH (Zurich Switzerland), states that more

than 50% of all patients show a reduction of maximal keratometry, and it reports no adverse intraocular or corneal effects to date. What effect is taking place here? Furthermore, how does exposing the cornea to a wavelength of 360 to 380nm affect these observations? How long will the effects last? What will the long-term data show? Despite my previous doubts, I hope this technology proves viable. Ophthalmology

needs a way to combat ectasia. A starting point will be peer-reviewed data on this topic that will soon be available.

I believe ophthalmologists, patients, and innovators always want hope to win out over skepticism for the furtherance of the field. For this reason, we will continue to watch these and other new technologies develop with cautious optimism. ■



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