Avoiding Surprises

The OPD-Scan III efficiently provides exam data, which keeps patients happy in a busy, one-ophthalmologist practice.

AN INTERVIEW WITH DWAYNE BAHAROZIAN, MD
BY JAMES KNAUB, CONTRIBUTING EDITOR

Today's patients expect exceptional visual outcomes from cataract surgery and laser vision correction. Dwayne Baharozian, MD, uses the OPD-Scan III (Marco) to gather the exam data needed to plan surgical procedures that meet those high expectations.

"You're always trying to avoid an unpleasant refractive surprise," Dr. Baharozian says. "The OPD-Scan III provides us with data we otherwise wouldn't have and this helps us achieve optimal results."

Premium IOL Candidates

At Family Eye Care Center & Optical Gallery in Westford, Mass., Dr. Baharozian's 11,000-square-foot practice – also staffed by four optometrists – the versatile OPD-Scan III is used as an autorefractor, autokeratometer, corneal topographer, pupillometer, wavefront aberrometer and anterior segment camera. Dr. Baharozian says the system has proven particularly valuable in several specific areas of his practice, specifically for cataract patients seeking premium IOLs. During cataract evaluation visits, technicians use the OPD-Scan III to measure angle kappa, corneal coma and pupil size in mesopic and photopic light. Those measurements help Dr. Baharozian assess whether the patient is a good candidate for a premium IOL.

Patients with a high angle kappa can have a plano post-op refractive error and still have vision problems because they may not be looking through the center of a diffractive IOL in different lighting conditions, Dr. Baharozian says. Similarly, a patient may not be an optimal candidate for a multifocal IOL if his pupil is too large or too small or if a patient has high levels of corneal coma.

"Each premium IOL candidate has to pass these tests or he'll be disappointed with his visual outcome and I will encounter post-op complaints," Dr. Baharozian says. He notes that patients who pay the approximately $1,200 to $2,500 out-of-pocket cost for a toric or multifocal IOL, bring high expectations to the surgery suite. For patients determined to be good candidates for a multifocal IOL, accurate angle kappa data from the OPD-Scan III helps Dr. Baharozian plan procedures that meet their lofty expectations. The measurements also allow him to show patients who are not good candidates why a premium IOL isn't best for them.

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"Accurate advanced testing and personal, face-to-face counseling before surgery reduces the number of unhappy patients because you rule them in or out for a multifocal IOL before you put the lens in," Dr. Baharozian says, "This qualification process is a major step in achieving the ultimate goal of an accurate result and a happy patient."

If the measurements taken during the cataract evaluation suggest that a patient is a borderline candidate for a multifocal IOL, an even more detailed discussion ensues. Dr. Baharozian says he sees some patients who are very motivated to have a multifocal lens implanted but are marginal candidates. He uses information from the OPD-Scan III during consultation to convince patients to proceed with a monofocal IOL. If a marginal candidate still pushes for a multifocal IOL, the data and discussion can limit unrealistic expectations and unpleasant surprises.

The OPD-Scan III also helps Dr. Baharozian determine whether patients with irregular corneas are good candidates for toric IOLs. After surgery, it also can be used to evaluate whether the

toric implant is properly aligned with the patient's astigmatism.

"It's quite gratifying to see how a patient's preoperative astigmatism was so successfully reduced, or even eliminated, when comparing the postoperative to the preoperative OPD-Scan III results," Dr. Baharozian says. "This information is easily obtained and displayed. When shown to patients, they appreciate seeing the science behind the visual result they're already experiencing."

Patients with Laser Corrected Vision

"Patients who've had laser vision correction outside his practice are a third group of cataract surgery candidates in which Dr. Baharozian often finds the OPD-Scan III useful. In most cases, these patients don't have any information whatsoever regarding their prerefractive surgery status or about their laser vision correction surgery itself. Those patients can be tested easily with the OPD-Scan III to determine all of the measurements delineated above as well as their average pupil power (APP). Having an accurate APP is critical in determining what IOL power to choose when this information is entered into the IOL-calculating formulae.

"This aspect of the OPD-Scan III has really been a life-saver with regards to accurately determining which IOL power to use during surgery," Dr. Baharozian says. "In fact, colleagues in the area are sending their patients to my office to have the OPD-Scan III performed on them so this critical data can be obtained. I've even received personal notes of gratitude from referring doctors for their improved outcomes with these patients.

Different Lighting Conditions

The OPD-Scan III's ability to provide data about patients' vision in different lighting conditions is important to Dr. Baharozian. He says it's not uncommon to see up to a 0.75 D difference in a patient's refraction between medium and bright light, which is an example of the optical path difference for which the OPD is named.

"If the patient is evaluated only when dilated, it won't give you complete, accurate data," Dr. Baharozian says. "You want to analyze patients in their natural state. I want to know what their vision is like when they're walking around every day in various types of lighting."

Dr. Baharozian uses this information when determining a preoperative plan for his laser vision correction candidates. Having a significant optical path difference is likely to affect their vision in different lighting conditions. Refractive surgery candidates also undergo corneal topography analysis using the OPD-Scan III.

Convincing Insurers

Dr. Baharozian says the system's black and white retroillumination photographs have proven helpful in demonstrating to insurance companies that a cataract procedure is necessary. For example, he's had cases in which a patient has a seemingly minor paracentral cataract that doesn't significantly interfere with vision in normal lighting. However, in low-to-moderate lighting, this same cataract can greatly obscure vision. Showing an insurer the visual axis photograph acquired in mesopic lighting conditions illustrates the patient's real world impairment and usually ends any debate about whether surgery is necessary.

Ease of Use

The broad range of data gathered by the multifaceted OPD-Scan III doesn't come at the expense of practice efficiency. Dr. Baharozian says that when operated by a skilled technician, it doesn't slow down the practice's patient flow.

One of the Family Eye Care Center's main technicians, Nancy Rousseau, COA, says the OPD-Scan III interfaces cleanly with their EHR and practice management system (Compulink) and data management system (Forum, Carl Zeiss Meditec). "It's user-friendly, almost like using just an autorefractor," Rousseau says. "It's easy to use and automatically sends precise measurements into our system." That capability lets Rousseau quickly gather and deliver the patient exam data Dr. Baharozian needs to discuss surgical options with the patient and plan the upcoming procedure while she moves on to her next case. The bottom line is that the OPD-Scan III efficiently provides the data that helps Dr. Baharozian plan procedures that achieve excellent visual results and satisfied patients.

"We're very happy to be able to provide detailed preoperative testing for both cataract and laser vision correction patients using this advanced technology. Simply put, more accurate data leads to better outcomes, which lead to happier patients," Baharozian says. "That leads to more positive word-of-mouth referrals from patients."