The Puzzle Solver

Uncover data to improve your refractive cataract surgery results and provide explanations that enhance patient satisfaction

AN INTERVIEW WITH TIMOTHY PAGE, MD
BY RACHEL DANCE, STAFF WRITER

Many cataract surgeons have experienced a surgical case they thought was a home run—one in which everything looked perfect and the patient was seeing 20/20—yet the patient was very unhappy with the results. Cases like these can be frustrating for both patient and doctor. But, with careful preoperative planning and accurate data collection, they can be prevented.

The OPD-Scan III has helped Tim Page, MD, at Oakland Ophthalmic Surgery in Birmingham, Mich., mitigate these cases to ensure the home runs actually happen in his practice. His practice focuses largely on refractive cataract surgery and postoperative refractive cataract surgery consulting. In addition to providing optimal preoperative tools to collect data to strategize and perform the best possible refractive cataract surgery, the OPD-Scan III has helped to solve issues in patients who present with postoperative visual acuity problems.

Fast, Reliable Data Collection
In the span of 10 seconds, the OPD-Scan III provides Dr. Page with thousands of data points that enable him to break down various components of the eye to determine what factors are causing issues, and how to address them in his surgical plan for each individual patient.

“One of the first things I look at when I examine the cornea of these patients is the spherical aberration,” says Dr. Page. Unlike standard topographers that simply indicate regular astigmatism, the OPD-Scan III also provides the patient’s spherical aberration in the cornea. “This feature has elevated my ability to achieve excellent outcomes in my refractive cataract practice because I’m able to match patients to a specific lens based on what I see from the aberrometry results,” says Dr. Page.

In addition to the topographic values measured by the OPD-Scan III, the placido image in the system aids in preparing the surgeon and the patient for expected postrefractive cataract surgery results. For example, the image can indicate abnormalities, such as dry eye. By explaining to the patient that the dry eye should be treated before—and possibly after—the surgery, surgeons can better manage patient expectations. This is particularly important so that after surgery, the patient understands that the dry eye was a preexisting condition and was not caused by the surgery.

Enhanced Patient Education with Real-time Imaging
As part of the cataract consultation, Dr. Page looks at the contribution of the cataract to the patient’s loss of visual acuity. With the point spread function in the OPD-Scan III, Dr. Page can show patients exactly how the cataract affects the eye.

“I had a gentleman come in who was complaining of glare while driving at night. He drew what it looked like when cars were coming at him—a circle with rays com-
ing out of it and some little jagged edges on it. When we did the OPD scan, we showed him the retroillumination image of his cataract, and he was able to see his cataract with these cortical spokes coming into the center of his vision. I said, ‘This is what is causing the rays of light to occur.’ It’s almost universal that these patients nod their heads and say, ‘Yeah, that’s what I see.’ It validates what is causing their trouble.”

The imaging system in the OPD-Scan III goes beyond confirming to patients that the doctor understands what they see; it also allows doctors to educate patients about best options moving forward. Many cataract patients today are very savvy and do their own research before a consultation, so they come into the office with a good idea of what they’d like done. The OPD-Scan III can illustrate to patients presenting with an irregular cornea who may, for example, want a multifocal lens, that the multifocal lens could, in fact, worsen their vision.

**OPD-Scan III maps provide relevant data and patient education.**

**Improve Post-operative Results**

“When patients are having trouble with their eyes, the OPD-Scan III helps me uncover the cause, which often wouldn’t be obvious with other technology and measurements,” says Dr. Page. For example, Dr. Page had a patient with multifocal implants who was complaining of glare despite her refraction being almost plano. The OPD-Scan III revealed that she had a significant degree of coma in her cornea, which means she would likely not tolerate a multifocal lens well. This is something a surgeon could never know with the standard technology used for a cataract evaluation because it doesn’t measure these types of higher-order aberrations.

It isn’t uncommon for everything to look good to the surgeon but for the patient to be complaining of visual acuity issues. In fact, Dr. Page sees a number of patients who have had cataract surgery from great surgeons but who are having some trouble seeing. For these patients, the OPD-Scan III is a critical part of finding a solution to their vision problem, as it will indicate whether the lens is tilted, the patient has astigmatism with the lens implant, there’s higher-order aberration, or the IOL is decentered. “We figure out what’s causing the dissatisfaction and adjust the lens accordingly,” says Dr. Page.

The point spread function enables doctors to break down the components of the eye and demonstrate that they understand what the patient is describing. Postoperatively, this is important, as patients who hear from the surgeon, “Everything looks great; you’re 20/20,” are frustrated because they can’t validate what they’re experiencing. “Seeing that the doctor understands is an ‘Ah-ha!’ moment for them. It’s a lot of fun,” says Dr. Page. “The OPD-Scan III has really been a puzzle-solver; it has been a key to solving problems for many these patients who you would expect to be happy but are not, and it allows us to give them some answers and options.”

**Better Data, Better Results**

Running the scan takes the same amount of time as doing so on a standard topographer, yet the results from the OPD-Scan III provide thousands more data points that can illustrate to the patient what is going on in the different parts of his eye. Although this may increase the consultation time, the benefits of these additional data points more than make up for it. “My consultations for cataract surgery are a little bit more time intensive and it does take a little more time to explain the relevant data to patients, but it is quality time,” says Dr. Page. “The level of appreciation I get from my patients by going through this pays off in spades.”

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