OSD AS A PRACTICE STRATEGY

Protecting premium IOL outcomes as well as practice throughput and revenue.

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Ocular surface disease (OSD) management is one of the most practical ways to optimize the refractive accuracy of cataract surgery, patient satisfaction, and clinical efficiency. If patients choose toric or presbyopia-correcting IOLs, their tolerance for postoperative visual fluctuation is typically low, and the cost of additional chair time and enhancements after surgery is high.

This article discusses the value of identifying and stabilizing visually significant OSD preoperatively and the operational design that allows practices to do this at scale without slowing throughput.

WHY THE OCULAR SURFACE MATTERS IN REFRACTIVE CATARACT SURGERY

Preoperative planning depends on repeatable measurements. When the tear film is unstable, corneal power and the axis of astigmatism can vary. The inaccurate measurements can result in refractive surprises and, after toric IOL implantation, meaningful residual astigmatism. Even mild surface irregularity, moreover, can cause patients to experience glare, halos, or a poor quality of vision after the implantation of presbyopia-correcting IOLs.

Symptoms are not a reliable indicator of OSD. Asymptomatic patients may have objective findings such as abnormal osmolarity, inflammation, and/or meibomian gland dysfunction.

An organized approach to ocular surface health can reduce measurement noise, improve refractive predictability, and preserve patients' trust in the surgeon and staff. It can also avoid the operational burden of extra testing, additional chair time, and enhancement discussions postoperatively.

CLINICAL PROTOCOL AND DECISION POINTS

The goal is to identify visually significant OSD early, stabilize the ocular surface, and then confirm measurement repeatability before proceeding to final planning. In many practices, the process begins with a quick symptom screening combined with objective testing. The diagnostic tools vary but typically include tear film assessment, osmolarity, inflammatory markers, tear breakup time staining, and meibomian gland evaluation.

Treatment sequencing in surgical candidates should prioritize speed and measurement stability. We often start by controlling inflammation and improving tear film stability. Lid margin disease and meibomian gland dysfunction are addressed with home care and in-office procedures. The endpoints are symptom improvement, repeatable keratometry,

stable topography, and increased patient comfort. If a toric lens is planned, axis stability is a key readiness marker.

Final surgical planning does not proceed until the ocular surface stabilizes.

OPERATIONAL DESIGN THAT PROTECTS THROUGHPUT

Principle No. 1: Work Moved Upstream

Ocular surface screening (captured electronically or manually during intake) should occur in the cataract workup lane, not after the surgeon has decided on a lens. Pretesting includes the objective tools the practice uses to identify ocular surface instability. At Bowden Eye, these tools include tear film osmolarity, matrix metalloproteinase-9, meibomian gland imaging, and tear film evaluation.

Principle No. 2: Technician-Led Execution with Surgeon Confirmation

Trained staff can run tests, educate patients about treatments that the surgeon may recommend, and recognize when measurements are unreliable. The surgeon then offers confirmation, sets the treatment sequence, and defines the remeasurement criteria.

Principle No. 3: Clear Ownership

We believe that a cataract counselor who is well-versed in dry eye disease eliminates patient confusion. In most practices, appointing an ocular surface coordinator or lead technician is advantageous. The counselor becomes the point of contact for patient education, home care instruction, procedure scheduling, and follow-up timing. If the role is not defined, patient communication can be inconsistent, and the program can create friction rather than flow.

Principle No. 4: Readiness Checklist

We recommend implementing a checklist that determines whether biometry proceeds. Items on the checklist may include stable osmolarity, an absence of central staining, acceptable tear film breakup behavior, and repeatable keratometry.

SCHEDULING TEMPLATES

Scheduling must prevent ocular surface optimization from competing with biometry capacity. For example, a single optimization checkpoint visit can be scheduled for 2 to 4 weeks after therapy is initiated or after an in-office procedure. At that visit, the technician's checklist determines whether biometry and topography are repeated. If the ocular surface is stable, measurements are repeated, and the patient moves forward in the surgical process. If not, optimization continues until stability is achieved.

Many practices succeed by block-scheduling a limited number of procedural slots per week. This creates predictability and prevents procedures from spilling into high-volume cataract clinic time. As demand increases, the block expands. The goal is to protect the cataract pathway while creating access to ocular surface procedures when medically appropriate.

Communication at scheduling is critical. Patients must understand the reason for an optimization visit. When patients understand the why, they tend to be more compliant and less anxious.

KEY PERFORMANCE INDICATORS

The purpose of a surgical readiness strategy is to optimize refractive outcomes and patient satisfaction before and after surgery. Revenue from OSD diagnostics, procedures, and retail products can support the program, but it should not be the only metric. A complete set of key performance indicators connects four domains.

No. 1: Measurement Stability

Measurement-level indicators include the repeatability of keratometry and, in toric lens candidates, astigmatism axis stability. The percentage of cataract evaluations that require a remeasurement visit and the reasons why are tracked. This can reveal where screening and treatment are not occurring early enough.

No. 2: Refractive Accuracy

Refractive accuracy indicators can include prediction error distributions and the number of enhancements and unexpected residual refractive errors requiring additional visits. These metrics affect chair time and practice reputation.

No. 3: Patient Experience

Patient experience metrics can be simple—a symptom screening score and the answer to a question about visual fluctuation. These metrics may be tied to readiness milestones.

No. 4: Capacity Utilization

Capacity utilization metrics include the time from consultation to surgery, no-show rates for optimization visits, and the number of postoperative troubleshooting visits. A well-designed program should reduce the number of extended postoperative visits that are essentially refractive and surface troubleshooting.

PRICING AND VALUE

The practice's OSD pricing strategy should be transparent, ethical, and easy for patients to understand. Reasonable framing might sound like the following: "We are stabilizing the front surface of your eye to protect the accuracy of your measurements and the quality of your vision after surgery." When patients understand that ocular surface stability optimizes premium IOL outcomes, the value proposition is clear.

Balanced messaging matters. No single modality should be presented as the solution for every patient. ■

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