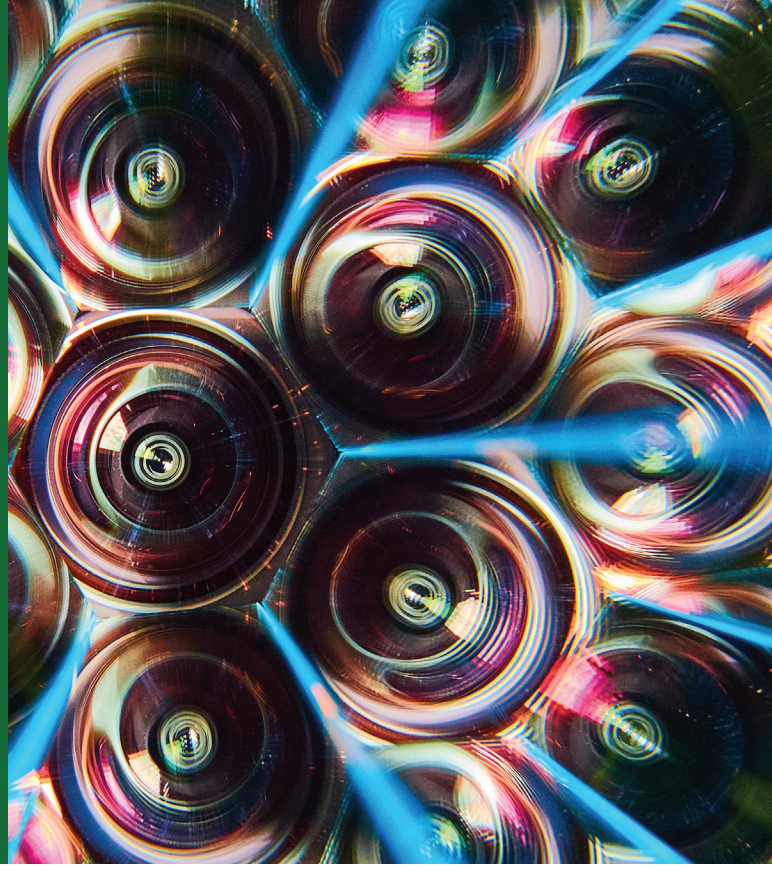
Consultation-to-Surgery Same-Day Bilateral RLE in an OBS Suite



A streamlined workflow can make refractive lens exchange feel more like refractive surgery than a traditional cataract pathway.

BY DAGNY C. ZHU, MD

In my practice, refractive lens exchange (RLE) is performed in our office-based surgery (OBS) suite on an elective, cash-pay basis, and immediately sequential bilateral procedures are offered routinely. Many motivated patients who present for a consultation proceed to surgery on the same day if their diagnostic workup and IOL inventory permit. In my experience, the OBS environment complements the RLE value proposition by providing patients with a familiar, low-anxiety setting and a streamlined scheduling pathway—from consultation through bilateral surgery—in a single visit.

Ultimately, positioning RLE competitively as a premium refractive procedure entails delivering a patient experience that rivals LASIK instead of one that mirrors traditional, insurance-based cataract surgery. This article shares how we achieve the former in our OBS suite.

SAME-DAY CONSULTATION-TO-SURGERY WORKFLOW

Initial Triage and Scheduling

The pathway begins at the point of initial contact. When a prospective patient calls to inquire about RLE, our staff assesses their interest in same-day surgery and coordinates scheduling accordingly. This is particularly valuable for out-of-state patients who prefer to consolidate the consultation and procedure into a single visit. They are advised that same-day surgery is contingent on favorable diagnostic findings and IOL availability. Our team prepares the day's schedule to accommodate a potential 3- to 4-hour consultation-to-discharge window.

Diagnostic Workup

Upon arrival, the patient undergoes a comprehensive preoperative evaluation. Before the surgeon encounter, technicians obtain the patient's uncorrected and best corrected distance and near visual acuities and perform Scheimpflug-based corneal tomography (Pentacam, Oculus Optikgeräte) and macular OCT screening.

An optometrist completes the initial clinical assessment, including a refraction and slit-lamp examination and provides an overview of the RLE procedure, including the use of a femtosecond laser and presbyopia-correcting IOLs. Importantly, they also inquire about the patient's occupation, hobbies, and frequency of nighttime driving to help guide proper IOL selection.

I then see the patient to confirm or modify the OD's plan and make my recommendation for the IOL platform best suited to that particular patient. I use an anatomic eye model to explain the surgical technique and the rationale for the IOL selected. If the patient is comfortable proceeding, the second phase of preoperative measurements begins.

Consent, Financial Counseling, and Preoperative Preparation

The patient meets with our patient counselor to complete informed consent, which includes signing a same-day bilateral surgery consent form, and financial arrangements; payment is collected before surgery.

Preoperative Biometry and Ancillary Testing

Optical biometry is performed with two platforms—the IOLMaster (Carl Zeiss Meditec) and the Argos (Alcon)—to

cross-validate axial length, keratometry readings, and anterior chamber depth measurements and to maximize confidence in IOL power calculations. Additional testing includes endothelial cell specular microscopy, optic nerve OCT (supplementing the macular OCT scans obtained earlier), and the previously completed tomography.

Assuming all findings are within normal limits, I review the IOL calculations and confirm that the appropriate lens powers are available. Our practice maintains extensive consignment inventories across multiple IOL platforms to support same-day surgery for the majority of patients.

Surgical Procedure

The patient is escorted to the preoperative area. Pupillary dilation is started, and the OD performs a dilated fundus examination. Oral sedation is administered. Either an MKO Melt (ImprimisRx) or oral midazolam alone is used, depending on the patient's age and other clinical factors.

Next, the patient is brought into the femtosecond laser suite, and bilateral treatment is performed. They are then transferred to the OBS suite.

The right eye is prepped and draped first. When surgery on the first eye is complete, all drapes are removed, and the left eye is prepared as a completely independent case. In accordance with immediately sequential bilateral cataract surgery best practices, a separate instrument tray, separate lot numbers for the OVD, and, when possible, separate lot numbers for the intracameral antibiotic are used. An intracameral antibiotic injection is performed at the conclusion of each case. Disposable I/A tips and cannulas are also used to minimize the risk of toxic anterior segment syndrome.

Postoperative Discharge

Postoperative drops are instilled, protective eye shields are placed bilaterally, and the patient and their accompanying family members receive verbal and written instructions in the recovery area. Follow-up is scheduled for postoperative day 1. In our experience, the entire same-day consultation-to-discharge pathway is completed in approximately 3 to 4 hours.

EXCLUSION CRITERIA AND EXCEPTIONS

Every prospective patient is informed during the initial phone consultation that same-day surgery is the goal but is not guaranteed. Several clinical or logistical findings may necessitate deferral.

Clinical Red Flags

If preoperative diagnostics reveal macular pathology, irregular corneal astigmatism, significant ocular surface disease (OSD), or anterior or posterior segment abnormality, the patient may not be a candidate for a multifocal or extended depth of focus IOL, both of which are typically my preferred platforms for RLE. In these situations, I explain why the patient is not a candidate for premium RLE and either counsel them on alternative options or defer the procedure.

Ocular Surface Optimization

If the limiting factor is OSD, a targeted treatment regimen is initiated, and the patient is scheduled to return in approximately 2 weeks for repeat topography and biometry. If the health of the ocular surface has improved and measurements are stable and reliable at that visit, same-day surgery may be offered. Some patients require a longer course of OSD treatment before their measurements meet our threshold for proceeding.

Referral for Comorbid Pathology

Patients with incidental findings such as macular disease or glaucomatous optic neuropathy are referred to a retina or glaucoma subspecialist for evaluation and management before RLE is considered.

IOL Inventory Limitations

If diagnostic testing is favorable but the required IOL power falls outside our consignment inventory—particularly for outlier dioptric ranges—the patient's surgery is scheduled for when the lens will be available. This scenario occurs most commonly with the Light Adjustable Lens (LAL; RxSight) because my practice does not carry a consignment inventory. LAL candidates undergo a full diagnostic workup, including confirmation that the pupil dilates to at least 6 mm, at the initial visit and are scheduled for surgery on a later day.

Post–Refractive Surgery Eyes

On average, my bilateral RLE patients achieve a high degree of refractive accuracy; close to 90% of eyes fall within a mean residual spherical equivalent of ±0.50 D. For the rare patient with atypical ocular anatomy or a history of refractive surgery with uncertain parameters, I may recommend delayed rather than immediately sequential bilateral RLE. With modern post–refractive surgery IOL formulas, however, I am typically confident in proceeding with same-day bilateral multifocal or extended depth of focus IOL implantation, even in post-LASIK and post-PRK eyes, provided the biometric data are consistent and the type of prior refractive correction (myopic vs hyperopic) is known or can be deduced based on the topography and clinical history. If the refractive outcome is uncertain, the LAL can be a good choice as it allows for postoperative titration of lens power. ■

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