

# OPTIMIZING TURNOVER IN CATARACT SURGERY



Adopting femtosecond laser technology to enhance surgical outcomes and streamline high-volume practices.

BY A. JAMES KHODABAKHSH, MD

Efficiency is crucial to both patient satisfaction and practice success, and OR turnover is a key component of efficiency in cataract surgery. Optimizing OR turnover involves evaluating and improving every step of the surgical process. The surgeon undoubtedly plays a central role, but it is important to acknowledge that numerous other factors and team members contribute to OR turnover.

This article explores how the adoption of femtosecond laser technology can affect OR turnover time and offers practical strategies for streamlining operations.

## PROS AND CONS

The introduction of laser technology has brought both challenges and benefits to OR efficiency in cataract surgery. Although the initial implementation of a femtosecond laser slows down the surgical process, its integration can ultimately improve patient outcomes. Laser technology offers more precise astigmatic keratotomy corrections, improved marking for toric lenses, and an overall enhanced patient experience.

In the early days of femtosecond laser cataract surgery, options were limited, and early adopters had to work with what was available. I was among the first US surgeons to adopt femtosecond laser technology, and I have worked with all the platforms over the years. As more options have emerged, we've gained the opportunity to compare the

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performance and patient experiences offered by each platform. I currently own a Catalys Precision Laser System (Johnson & Johnson Vision), a LenSx (Alcon), and an Ally Adaptive Cataract Treatment System (Lensar).

Over the years, advances in laser technology have helped enhance OR efficiency and patient satisfaction in my practice. Extensive research comparing efficiency across all current laser platforms is lacking, and therefore we are in the process of organizing such a study in my practice.

When considering adopting new laser technology, surgeons must carefully evaluate various factors, including OR turnover, patient outcomes, and overall satisfaction. Each platform has its strengths and weaknesses, which can affect the surgical process and patient experience.

It's also important to note the significant financial benefits of elevating standard cataract surgery to a premium experience. In my opinion, this benefit substantially outweighs

the extra few minutes added to a case by the laser. This merits consideration when evaluating the incorporation of a femtosecond laser into the surgical workflow.

## PRACTICAL WORKFLOW STRATEGIES

In my experience, the benefits of femtosecond laser technology outweigh the initial time investment required for its integration into the surgical process. Through a process of trial and error, surgeons can discover the optimal workflow suitable for their unique needs. Potential workflows include alternating between laser and nonlaser procedures, batching cases, and delegating use of the laser to another operator.

**Batching cases.** Some surgeons find it helpful to perform laser procedures in batches. For example, a surgeon might alternate between laser and nonlaser cases or execute multiple laser cases consecutively if operating within a dual-room setup.

**Delegating.** It's important to have a well-trained, efficient team. Tasks

such as laser docking and patient preparation can be delegated to other trained members of the surgical team. Some surgeons may consider delegating femtosecond laser usage to another physician or a physician assistant. While the patient is in the femtosecond suite, the surgeon can perform other tasks, such as finishing the previous case or getting prepared for the next one.

The goal is to strike a balance between maintaining efficiency and providing patients with the premium experience and benefits that laser technology can offer.

#### ADVANCES AND THE FUTURE

As laser technology evolves, so will the speed of, patient experience with, and data integration capabilities of the various platforms. The latest

femtosecond laser systems streamline surgery by minimizing the need to mark the eye and the time spent in the laser room.

As competition increases, each manufacturer is investing in advances to optimize the surgical experience for both the surgeon and the patient. Most platforms are undergoing significant expansion. Forthcoming innovations largely hinge upon iris registration, advanced marking techniques, and the integration of measurements from diagnostic devices such as the Cassini (i-Optics), Pentacam (Oculus Optikgeräte), and IOLMaster (Carl Zeiss Meditec). This convergence of technologies is expected to provide more accurate astigmatic keratotomies and toric IOL alignment across all laser platforms.

#### CONCLUSION

Looking ahead, advances in femtosecond laser technology are poised to bring about a new era of precision and efficiency in cataract surgery. By embracing these innovations, we can improve patient outcomes and continue to push the boundaries of what is possible in ophthalmic surgery. ■

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