

CATALYS Precision Laser System and ForTec Medical: a Winning Combination

Laser achieves better results for cataract patients, and the mobilizing company provides excellent customer service and support.

BY STEVEN MEADOWS, MD



When I first learned about the CATALYS Precision Laser System by Abbott Medical Optics at a medical conference, I was convinced that it was going to be the future of cataract surgery over the next decade.

As the femtosecond laser system became more popular, I visited other practices to watch physicians use the technology, and read several journal articles about the CATALYS System. Ready to move forward, I looked into the possibility of purchasing it, but my colleagues and I at Cleveland Eye and Laser Surgery Center—a 19-physician center—were not ready to make a large investment in a cataract machine at that time. However, I did not give up on gaining access to the innovative technology.

I was thrilled to learn that ForTec Medical, a company that mobilizes surgical technologies—including a broad array of lasers—to hospitals, surgery centers, and physician offices on an as-needed basis, had an (exclusive) agreement with Abbott for the CATALYS System. I proceeded to sign a Fortec service agreement.

BETTER RESULTS THAN BEFORE

I had immediate success from the onset in March 2014. My first patient, a 92-year-old woman with a dense brunescant cataract that in the past would have to be removed by extracapsular cataract extraction, had good results with 20/30 vision the next day.

But despite continuous impressive results, it remained difficult to sell the technology to some patients because it is an additional cost not covered by insurance companies and Medicare.

This prompted me to examine just how good my cataract surgery results were using the CATALYS System. To accomplish this, I studied 91 cataract surgery patients and divided them into three groups:

- 1) standard phacoemulsification (n = 29)
 - 2) standard phacoemulsification with intraoperative biometry (n = 30)
 - 3) CATALYS System with intraoperative biometry (n = 32).
- After garnering approximately 30 patients in each test group, I

collected data and measured the level of success based on uncorrected visual acuity. A total of 66% of patients in the group 1 achieved 20/40 or better visual acuity and 31% of patients in that same group had 20/25 or better. This means that 66% of patients were able to pass their driver's test without wearing glasses. These results were based on examination of one eye.

When looking at group 2, 93% had 20/40 vision or better, and the number of patients with 20/25 vision increased to 37%.

I was originally very pleased with the phaco (and intraoperative biometry) results until I started using the CATALYS System, and the results were even more impressive.

When looking at patients treated with femtosecond laser, the percentage with 20/40 or better vision increased to 97%. The proportion of patients with 20/25 or better vision rose to 57%. Again, these results were only for one eye. If patients had the procedure on both eyes, the likelihood of having great vision is very high.

I should note, moreover, that patients in the femtosecond laser group had worse cataracts and more diseased eyes than patients in the standard group. This is because I strongly recommended the laser to patients with Fuchs' dystrophy or exceptionally dense cataracts, because there is a decrease in phaco energy used in the femtosecond laser procedure. Despite being more at risk eyes these patients had better outcomes.

After obtaining the study results, I made a paradigm shift in how I presented the laser procedure to patients as an additional tool for cataract surgery. Although it is unfortunate that it is an out-of-pocket expense for patients, I am pleased that they receive an added value for their money—a perfect capsulorhexis every time and improved visual outcomes (Figure 1).

WHY IT IS A GOOD MACHINE

From a product standpoint, the CATALYS Precision Laser System has multiple benefits. It provides for a safer procedure because it requires less spinning and manipulation of the lens, resulting in less stress on the capsular bag.

Two notable cases occurred when I did not use the femtosecond laser on the patient's first eye. Unexpectedly, during the operation I noticed that excessive zonular laxity was present, so I had

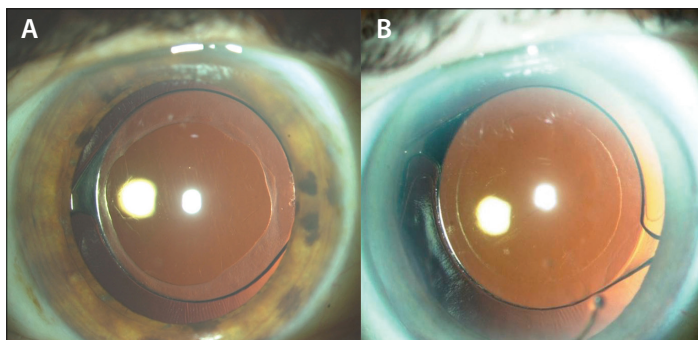


Figure 1. Manual capsulorrhexis after 1 month (A). CATALYS capsulotomy after 1 month.

to use Mackool hooks (FCI Ophthalmics) and capsular tension support devices for stabilization in both patients. Neither patient had pseudoexfoliation of the lens or a history of trauma, so there was no way to predict for either of them to have zonular laxity. Consequently, I used the femtosecond laser on each patient's second eye. The capsules were in fact weaker, but because the capsulorrhexis and the lens were already precleaved, I was able to take the lens out of the bag without needing extra devices.

When you encounter a broken capsule, it can be challenging and compromise results. Anything that reduces that risk is valuable. From my experience, the CATALYS System seems to be the best at lens fragmentation and capsulorrhexis (Figure 2). The laser also excels at creating astigmatic keratotomy corneal incisions and provides for mild astigmatism correction.

The CATALYS System capsulorrhexis is also very fast at less than 1.5 seconds, which is a safety feature. This is important because if a patient moves even slightly during that period, a tag can form or an incomplete capsulorrhexis may result. I have done wet labs on other lasers, where the capsulorrhexis took up to 5 seconds. That is a large window of opportunity for an incomplete capsulorrhexis to occur. My average overall dock time for the complete laser treatment is around 2 minutes or less in most cases.

EXCELLING IN CUSTOMER SERVICE

In addition to achieving remarkable patient results, working with ForTec Medical has been a pleasure. Whenever I buy or lease a piece of equipment, I am always a bit skeptical if a company will be true to its word. But I anticipated that ForTec would make a good partner after speaking with various experts on staff, and because they have been in business for more than 26 years and are the largest technology mobilizer in the United States.

In addition, ForTec's highly trained and certified medical technicians deliver and set up equipment the day before procedures are scheduled and assist with all procedures during the surgery day. Therefore, I do not have to train my own technicians. Using ForTec Medical's technicians is like having an insurance policy. If a technician is sick, the company sends another technician. If you rely on your own office technician and he or she is sick, that can be a huge problem.

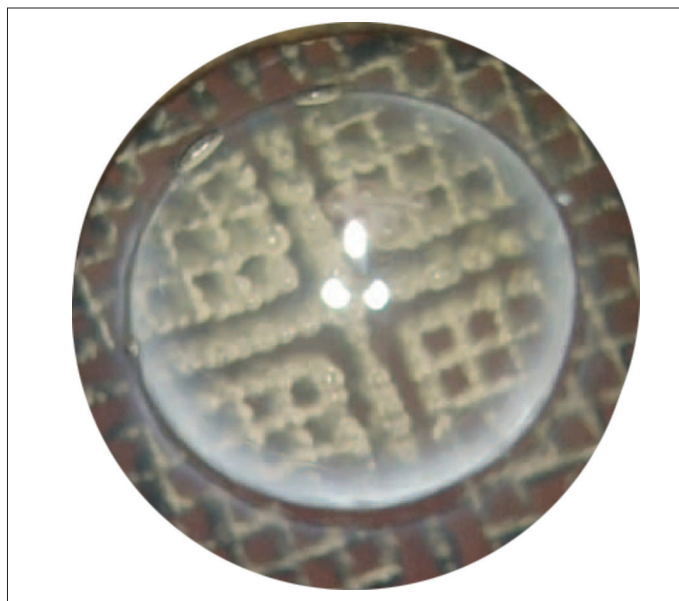


Figure 2. CATALYS - fragmented and softened nucleus.

Courtesy of Jason Jones, MD.

From a cost standpoint, I highly recommend mobilizing this type of system. When crunching the numbers, I realized that if we purchased the CATALYS System, it would cost our practice several hundred thousand dollars and annual maintenance would exceed \$40,000. Payback would take a number of years. But there is no financial commitment with mobilizing, meaning a practice is profitable from the very first procedure.

ForTec Medical also manages all costs associated with maintenance as well as software and hardware updates. The fee we pay includes scheduling the laser, having a technician, and delivery. Simply put, mobilizing provides a huge cost savings to us.

The roll on/roll off set up provides many advantages. No one knows how technology will change in the next 5 years or what our eye center's needs might be. So by scheduling the CATALYS Precision Laser System with ForTec Medical, we can be sure the equipment is up to date and reliable.

GAINING POPULARITY

Fortec Medical brings the CATALYS System as often as we need it, generally bi-monthly. Sometimes, it can be a challenge to fit all the patients onto the surgery schedule, so having dependable and flexible laser scheduling is critical in a mobilizing partner; something that Fortec Medical evidently has in their 26 years of experience in mobilizing technology across the United States. ■

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