

Surgeons take another look at newer glaucoma treatments

Ranjan P. Malhotra, MD, FACS, and Melissa Toyos, MD, FACS, discuss the latest additions to their practices.

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Welcome to another edition of CEDARS/ASPENS Debates. CEDARS/ASPENS is a joint society of cornea, cataract and refractive surgery specialists, here to discuss some of the latest hot topics in ophthalmology.

To continue our discussion from last month on minimally invasive glaucoma surgery and other new glaucoma surgical techniques, **Ranjan P. Malhotra, MD, FACS**, and **Melissa Toyos, MD, FACS**, discuss the latest additions to their surgical armamentaria. We hope you enjoy the discussion.

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ISTENT SHOULD BE CONSIDERED IN ALL POAG CATARACT PATIENTS



Ranjan P. Malhotra

Of the more than 3.25 million cataract surgeries performed in the U.S. each year, 20.5% of patients have comorbid glaucoma and/or ocular hypertension. I place an iStent (Glaukos) in almost all my patients who have primary open-angle glaucoma during cataract surgery to mitigate their POAG. Because POAG is a chronic, progressive condition, we know that if patients are on monotherapy, their POAG is likely to progress, and they are likely to need additional therapy (medication, selective laser trabeculoplasty or surgery) in the future. During the consent, I advise my patients that the goal of the iStent is to decrease their chances of needing another glaucoma medication in the near future and potentially lessen dependence on glaucoma medication.

My selection criteria for implanting an iStent have a lower threshold than a trabeculectomy or a glaucoma shunt. In other words, any patient on medical therapy for mild to moderate POAG who is having cataract surgery should be considered for the iStent. The risks are minimal, and if it does not work, there is no harm done. Because it is minimally invasive, the anatomic structures are preserved and other glaucoma procedures are still options for the patient. Most importantly, if it is not done at the same time as cataract surgery, it cannot be done. The current coding only allows the iStent to be done concurrently with cataract surgery, and it will not be reimbursed by insurance companies as a standalone procedure. One precaution I take, which is different from when I am operating a straight cataract, is that I stop any prescription anticoagulants to decrease the risk of hyphema.

In addition to the studies for FDA approval, recent studies further illustrate the iStent's efficacy. Tobias Neuhann, MD, published in the December 2015 issue of *Journal of Cataract and Refractive Surgery* a 3-year study on 41 eyes. Mean preoperative IOP was 24.1 mm Hg, and mean postoperative IOP was 14.9 mm Hg at 36 months. Further, medications were eliminated in 74% of patients at 36 months.

The iStent is an exciting new MIGS procedure that, compared with trabeculectomy and other tube shunts, is less traumatic to the target tissue, has a favorable safety profile and is effective. This procedure should be strongly considered for all cataract surgical patients with comorbid POAG.

- **References:**

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IRIDEX TREATMENT OFFERS ALTERNATIVE TO MIGS



Melissa Toyos

If I have to blame something, I am going to go with a short attention span. A few years ago, I was set to start implanting stents for my cataract patients, but the reimbursements were not great in my area so we never put it into action. Eventually, the situation changed and I was ready to get started. My rep came, walked me through the process and bam! I nailed the first stent I tried. No big deal, I thought walking happily out of the OR — and then found I could literally never do it again. I spent probably two cataracts worth of time the next 3 surgery days positioning and repositioning my patient's head and the gonio lens. I discovered that the great Carlos Buznego, MD, reported that success with the iStent (Glaukos) is “all in the wrists.” About that time, someone told me that two iStents were needed to get a significant effect (not that insurance companies were on board with that) and that in the not-distant future there would be a push button device to replace the current system — so I decided to wait for something better.

Around that time, I ran across the Iridex Cyclo G6 device. It appealed to me for two reasons: We had already experienced great success with the Iridex MLT (MicroPulse laser trabeculoplasty) for glaucoma, and the laser we use for MLT also does continuous wave laser — the same technology that I use for my fractional CO₂ resurfacing procedures with great results and that our retina doctor was using to literally vaporize diabetic macular edema and central serous chorioretinopathy. I had done transscleral cyclophotocoagulation (TSCPC) before for end-stage eyes, and I knew the MicroPulse laser was ideal for controlling residual thermal damage without scarring for non-end-stage eyes. This was something new.

We have had the Cyclo G6 for a year now, and I recently analyzed my data. Many, but not all, of the patients who received the MicroPulse TSCPC treatment (MicroPulse P3 probe) were the worst of the worst glaucoma patients in our practice. I looked at 25 patients, all of whom had previously undergone selective laser trabeculoplasty or MLT and phaco. A few had trabeculectomies but were still uncontrolled on three to four topical medications. I found that, on average, their IOPs were reduced 35% to 40% within 24 hours of one treatment with the MicroPulse P3. Healing and postoperative steroids (immediate postop pulse dosing is key) were largely complete by 2 weeks, and at the 1-month mark, IOPs even in these very difficult patients were consistently down by 20%. Patients' medication usage was reduced by 70% (approximately two medications were eliminated from their regimen). This is consistent with other published reports. Other important perks included being able to do these

procedures in the office in under 3 minutes with fewer side effects than more invasive procedures.

What are the downsides? One of the biggest ones is the absolute need for retrobulbar anesthesia. Patients do not like needles, but they prefer them to more invasive surgeries, and we also give anxiolytics if needed to make them more comfortable. Because this is a relatively new procedure, reimbursements can be slow or irregular. Luckily, the reps are equipped to deal with these issues as the company seeks permanent solutions, and they also offered a quick Corcoran Consulting Group consult that was helpful to my staff.

All in all, I have found the MicroPulse P3 to be a non-incisional, easy and safe way to reduce pressure any time my patients need it. It is predictable and highly efficacious, and seeing dramatic drops in pressure within 24 hours has satisfied even my short attention span.

- **References:**

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