

CRST

Cataract & Refractive Surgery Today

Sponsored by

GLAUKOS[®]
Transforming Glaucoma Therapy

CHOOSING iSTENT FOR THE REFRACTIVE CATARACT PRACTICE



Criteria to consider when incorporating MIGS technology into your practice.

BY KERRY D. SOLOMON, MD



In my cataract and refractive practice, treatment of mild to moderate open-angle glaucoma has become commonplace. I still refer patients with uncontrolled or advanced glaucoma to a glaucoma specialist, but when glaucoma is controlled on one or more medications, I often perform cataract surgery with the addition of a microinvasive glaucoma surgery (MIGS) device. The device that best meets my criteria to incorporate MIGS technology into my practice is the iStent Trabecular Micro-ByPass Stent (Glaukos).

About 60% of my cataract patients choose refractive cataract surgery to try to reduce their dependence on glasses. Patients have high expectations after these procedures and, oftentimes, expect to have better vision without their glasses. They also expect a fast, smooth recovery. Any MIGS procedure that enables me to simultaneously treat glaucoma while meeting these tough expectations is a win-win for my patients and my practice. If a treatment has the risk of negatively impacting patient outcomes, case management, or the patient experience, then we would not adopt it.

“FIRST, DO NO HARM”

My first criteria for incorporating a MIGS device into my practice is the product must have an excellent safety

and efficacy profile, evidenced by a predictable postoperative course. My mantra is “Do No Harm”—I do not want to have changes in the standard postoperative course for cataract surgery, nor do the medical ophthalmologists or comanaging optometrists that observe my patients. We want to see successful surgery with a smooth, uneventful recovery and happy patients.

Because of its excellent safety and efficacy profile,¹ I felt comfortable using iStent immediately after its release. It has not caused any additional complications for my patients. I have had zero cases of hypotony, hyphemas, or extruded devices, and I would estimate that 75% to 80% of my patients are on one or no medications after surgery.

Another criteria of mine was that the device must not degrade or delay visual outcomes. Although we try to

I have had zero cases of hypotony, hyphemas, or extruded devices, and I would estimate that 75% to 80% of my patients are on one or no medications after surgery.

To watch videos of Dr. Solomon speaking about iStent and other videos from Glaukos, go to eyetube.net/collections/glaukos

control expectations and tell premium cataract patients to expect a period of stabilization, they still expect great vision from day 1. We want our patients walking away with a “wow” effect, and we want to maintain those outcomes. iStent has performed well in my premium cataract patients and has had no impact on visual outcomes. With other MIGS devices or glaucoma procedures, we know this isn’t always the case. By performing refractive cataract surgery coupled with iStent, we are not only improving vision and reducing dependency on eyeglasses, we are also potentially improving quality of life without the inconvenience, discomfort, and expense associated with glaucoma medications.

In the process of building a practice that emphasizes refractive cataract surgery, my colleagues, staff, and I have spent a lot of time and effort designing preoperative and postoperative processes to streamline patient flow. Thus, we want any additional treatment beyond cataract surgery to work seamlessly throughout our day. We should be able to maintain our normal flow and rhythm throughout our testing and examination process, my conversations with patients, and my OR day. Getting into a rhythm may sound like a small thing, but it is important, particularly as we build a positive patient experience that includes staying on schedule in the office and surgery center. In adding iStent to refractive cataract surgery, we have been able to maintain our rhythm, improve patient care, and achieve the high levels of satisfaction that patients expect from their surgery.

HOW TO GET STARTED

Initially, I thought the learning curve for MIGS devices was going to be quite long, but I found that these procedures are readily achievable and should be well within the skill level of all comprehensive surgeons.

If you are adopting the iStent in your practice, I think it is best to start learning the surgical techniques before you implant a device. At the end of routine cataract procedures, get used to visualizing the trabecular meshwork. Turn the patient’s head, turn the microscope, and using just the tip of your viscoelastic cannula, pretend you are going to insert an iStent. Once you get comfortable positioning the head and getting a clear, consistent view of the trabecular meshwork anatomy with a gonio lens, you have completed 90% of the learning curve. In addition to positioning the head and microscope, I have learned to pull up a little on the gonio lens and keep a neutral hand position. This helps with my visualization. If you have a tendency to push down, viscoelastic can become evacuated and affect your view.

In my practice, patients follow the standard cataract postoperative medication regimen. They stay on their glaucoma medications for the first month postoperatively, and then we re-evaluate their need for glaucoma medication at the 1-month visit.

In closing, the iStent has been a welcomed addition to my armamentarium that provides patients an excellent opportunity to address their mild to moderate glaucoma at the same time as cataract surgery. My results have been impressive, and I have been happy with what these procedures have done for my patients and my practice. ■

1. Samuelson TW, Katz LJ, Wells JM, et al. Randomized evaluation of the trabecular micro-bypass stent phacoemulsification in patients with glaucoma and cataract. *Ophthalmology*. 2011; 118:459-467.

KERRY D. SOLOMON, MD

- Director, Carolina Eyecare Research Institute, Mount Pleasant, South Carolina
- Adjunct Clinical Professor of Ophthalmology at the Medical University of South Carolina in Charleston
- kerry.solomon@carolinaeyecare.com
- Financial disclosure: Consultant (Glaukos)

INDICATION FOR USE. The iStent® Trabecular Micro-Bypass Stent (Models GTS100R and GTS100L) is indicated for use in conjunction with cataract surgery for the reduction of intraocular pressure (IOP) in adult patients with mild to moderate open-angle glaucoma currently treated with ocular hypotensive medication. **CONTRAINDICATIONS.** The iStent® is contraindicated in eyes with primary or secondary angle closure glaucoma, including neovascular glaucoma, as well as in patients with retrolubar tumor, thyroid eye disease, Sturge-Weber Syndrome or any other type of condition that may cause elevated episcleral venous pressure. **WARNINGS.** Gonioscopy should be performed prior to surgery to exclude PAS, rubeosis, and other angle abnormalities or conditions that would prohibit adequate visualization of the angle that could lead to improper placement of the stent and pose a hazard. The iStent® is MR-Conditional meaning that the device is safe for use in a specified MR environment under specified conditions, please see label for details. **PRECAUTIONS.** The surgeon should monitor the patient postoperatively for proper maintenance of intraocular pressure. The safety and effectiveness of the iStent® has not been established as an alternative to the primary treatment of glaucoma with medications, in children, in eyes with significant prior trauma, chronic inflammation, or an abnormal anterior segment, in pseudophakic patients with glaucoma, in patients with pseudoexfoliative glaucoma, pigmentary, and uveitic glaucoma, in patients with unmedicated IOP less than 22 mmHg or greater than 36 mmHg after “washout” of medications, or in patients with prior glaucoma surgery of any type including argon laser trabeculoplasty, for implantation of more than a single stent, after complications during cataract surgery, and when implantation has been without concomitant cataract surgery with IOL implantation for visually significant cataract. **ADVERSE EVENTS.** The most common post-operative adverse events reported in the randomized pivotal trial included early post-operative corneal edema (8%), BCVA loss of ≥ 1 line at or after the 3 month visit (7%), posterior capsular opacification (6%), stent obstruction (4%) early post-operative anterior chamber cells (3%), and early post-operative corneal abrasion (3%). Please refer to Directions for Use for additional adverse event information. **CAUTION:** Federal law restricts this device to sale by, or on the order of, a physician. Please reference the Directions for Use labeling for a complete list of contraindications, warnings, precautions, and adverse events.

iStent and Glaukos are registered trademarks of Glaukos Corporation. PM-US-0023