INSERT TO
GT
Glaucoma Today

SPONSORED BY
GLAUKOS®
Transforming Glaucoma Therapy

JANUARY/FEBRUARY 2018

Creating Synergies With iStent Implants

BY ELIZABETH YEU, MD

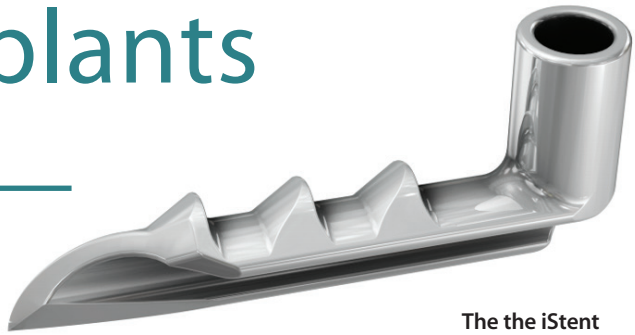
About 75% of our patients at Virginia Eye Consultants are referred to us by optometrists for cataract surgery. Many of these patients also have stable mild to moderate glaucoma that is being managed by primary eye care specialists. They have one or two antiglaucoma drops on board, which may lead to toxic medicamentosa or dry eye.[1]

As an anterior segment surgery specialist, I have two main focuses within my practice: cataract and ocular surface pathology. Being able to provide an option at the time of cataract surgery that could prevent the progression of a patients' glaucoma has been a phenomenal opportunity. In this article, I discuss my experiences with the iStent Trabecular Micro-Bypass Stent (Glaukos), which makes this option possible via microinvasive glaucoma surgery (MIGS).

MORE OPTIONS WITH MIGS

MIGS is booming right now, as it should be, because it enables us to offer patients options to decrease their dependency on antiglaucoma medications. I believe the ideal procedure is one that can be performed at the time of cataract surgery to help reduce patients' IOPs while decreasing the risk of the postoperative surprises that glaucoma surgeons may see with more traditional glaucoma filtration surgery, such as flat anterior chambers, hyphemas, or hypotony. I also want low complication rates and happy patients.

Glaucoma is not my specialty, so I defer patients who have more advanced disease to my colleagues who specialize in glaucoma. For patients who have stable glaucoma and are using one to two medications, I love being able to offer a procedure that may help reduce their dependency on medications.



The the iStent Trabecular Micro-Bypass Stent.

Being able to provide an option at the time of cataract surgery that could prevent the progression of a patients' glaucoma has been a phenomenal opportunity.

To see more videos from Glaukos, go to **eyetube.net/collections/glaukos/**

For any anterior segment surgeon interested in providing interventions via MIGS, I recommend starting with the iStent, a procedure that is readily adoptable, has a low complication rate, and provides predictably good outcomes.[2]

GETTING STARTED—WHAT TO EXPECT

My first iStent surgeries about 5 years ago were somewhat awkward, because I was not accustomed to performing direct gonioscopy in the operating room. After completing a few cases, however, my nondominant hand had committed the maneuvers to muscle memory, and I was pleasantly surprised how easy that task became. After about five cases, I started feeling comfortable using the iStent implant. The key is identifying the trabecular meshwork.

Normally, when performing cataract surgery, I operate with my dominant hand in the temporal wound, slightly off axis. With the iStent, I place the wound closer to 180° to create a perfect fulcrum where I can use the edge of the wound when I am entering with the iStent device. This gives me more stability, enabling me to find the perfect angulation to engage the trabecular meshwork.

My technique has evolved in the last several years, and I have become quite comfortable with the iStent procedure. While it adds a few minutes to the entire surgery, the efficacy of my outcomes makes it worthwhile.

IMPROVED REFRACTIVE RESULTS

When we offer refractive cataract surgery, we must have good data to achieve optimum results. About 50% of my patients opt for advanced technology IOLs to ensure they will have better uncorrected quality of vision; however, these patients often have comorbidities, such as glaucoma and some resultant dry eye. It has been exciting to be able to provide an alternative for my patients.

When I see patients who have been referred to me, I often see signs of topical antiglaucoma therapy: retraction, long eyelashes, dark circles under the eyes, along with some surface punctate epitheliopathy from long-term use of these medications. It is a pleasure for me to be able to tell patients that by implanting the iStent during their cataract surgery, I may be able to reduce the number of antiglaucoma drops they need.

CONCLUSION

When I heard 5 or 6 years ago that I would be able to perform an intervention that could help reduce the number of topical medications required by patients with stable mild to moderate glaucoma, I felt it was a wonderful opportunity.

I have been using the iStent now for about 5 years with great success. Offering the iStent has been a nice opportunity for my patients. They are happy that this surgery may enable them to reduce the number of antiglaucoma drops they are using, which in turn can help reduce the side effects of the topical medications. ■

1. Mathews PM, Ramulu PY, Friedman DS, et al. Evaluation of ocular surface disease in patients with glaucoma. *Ophthalmology*. 2013;120:2241-2248.
2. Resende AF, Patel NS, Waisbourd M, Katz LJ. iStent Trabecular Microbypass Stent: An Update. *J Ophthalmol*. 2016:2731856.

Elizabeth Yeu, MD
- partner and cornea, cataract, and refractive surgeon at Virginia Eye Consultants in Norfolk
- assistant professor in the Department of Ophthalmology at Eastern Virginia Medical School, Norfolk
- eyeu@vec2020.com
- financial disclosure: honoraria from Glaukos; consultant to Alcon, Bausch + Lomb, and Johnson & Johnson Vision