MIGS AND THE COMPREHENSIVE OPHTHALMOLOGIST

Master these minimally invasive procedures to address glaucoma at the time of cataract surgery.

BY MICHAEL PATTERSON, DO

Thanks to ophthalmologist innovators such as Iqbal Ike K. Ahmed, MD, FRCS, microinvasive glaucoma surgery (MIGS) has become the most disruptive technology—or, more precisely, group of technologies—in eye care since phacoemulsification. Any ophthalmologist can perform MIGS procedures—even surgeons without access to an expensive femtosecond laser. The advent of MIGS has truly revolutionized glaucoma care for the comprehensive ophthalmologist. In my practice, we have performed MIGS since the term was coined.

GETTING STARTED

It is unlikely that new ophthalmologists will be adequately trained to use every MIGS device while in residency, so it is therefore necessary to learn by doing in practice. Even though it can be intimidating to use a surgical device for the first time, one key to success is to become mentally prepared. Intraoperative gonioscopy can help the surgeon visualize appropriate landmarks in the eye before he or she performs a MIGS procedure.

Patient selection is another key to success. For a safe and effective outcome with MIGS, a healthy angle is required. Additionally, patients who have preexisting conditions that prevent them from changing positions in the OR may not be good candidates for MIGS because the surgeon cannot operate at the necessary angle required by the procedure.

Do not force patients into a new procedure simply to become an early adopter of that procedure. When you adopt a new procedure, it is crucial that you achieve great outcomes. This helps build your personal reputation as well as the reputation of the device. Poor outcomes do the opposite.

IMPLEMENTING MIGS

My recommendation for successful implementation of MIGS into your practice is to take on one technology at a time. (Your staff will thank you.) Do not attempt to learn four surgeries at once. The amount of preoperative preparation required to master MIGS procedures can be tremendous. When I began implementing new procedures in my practice, I made mistakes that I later wished I could reverse. One of those mistakes was pushing my staff members to learn the ins and outs of these new technologies too quickly. In hindsight, I should have slowed down the learning process for the benefit of everyone involved.

It is also important to make sure your patients have a good understanding of their options with regard to medications and procedures. With my patients, I first discuss the risks and benefits of glaucoma drops. Drops can be expensive for the patient; toxic to the surface of the eye; and, over time, can destroy the conjunctival epithelial cells, leading to poor outcomes if and when advanced glaucoma surgery is needed. I then discuss the risks and benefits of selective laser trabeculoplasty, which I believe is a more effective and less disruptive option for a patient than drops. Finally, I discuss the risks and benefits of whichever MIGS procedure I think would be appropriate for the patient.

PERFORMING SURGERY

When cataract surgery patients have concomitant glaucoma, I like to tell them that we want to kill two birds with one stone. Because we are already performing surgery, and numerous studies have shown that there is no increased risk when MIGS is added at the time of cataract surgery, most of my patients see this as a win-win. However, I tell them, there is one caveat: This will not get you off drops, but it will hopefully reduce your medication burden. In this regard, it is important to underpromise and overdeliver. The surgical procedure will hopefully mitigate any IOP rises that occur.

I use this analogy with patients: “Your sink drain is clogged, but, unlike your sink, your eye has a lid. This, in effect, becomes a percolator and causes IOP to slowly rise. To prevent this, I am going to create another drain in your sink. This will allow the water to leave your eye when the pressure tries to rise. Your optic nerve will no longer be subject to these pressure spikes.”

This analogy usually helps patients understand what I am about to do, and it makes them more confident in the surgical procedure. I also tell patients that typically their visual acuity will be dramatically reduced in the first week postoperative. Sometimes I see no problems, and BCVA is 20/20 on postoperative day 1. But, in case I encounter some intraocular hemorrhaging during surgery, I like to temper expectations about the postoperative course of recovery.

CONCLUSION

MIGS procedures can be challenging, but for most comprehensive and anterior segment surgeons they are easy to learn with proper training and education. These novel procedures offer a safe and effective means to help your patients reduce their glaucoma medication burden. You do not want to miss out on this chance to help your patients.

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