MIGS IN RESIDENCY



Surgical management of glaucoma is no longer limited to glaucoma specialists.

BY MANJOOL SHAH, MD

reatment for glaucoma has changed dramatically over the past few years. Multiple microinvasive glaucoma surgery (MIGS) options have become available, and the safety profiles of these procedures have made it beneficial to intervene surgically at earlier stages of the disease. The growing number of glaucoma patients and ability for surgical intervention at all disease stages mean that every ophthalmologist will likely be involved in treating glaucoma at some point in their careers. Surgical management of glaucoma is no longer limited to glaucoma specialists.

Generally, residents have chosen ophthalmology in an effort to help patients address and manage eye disease in the safest, most effective ways possible. Despite the changing landscape of patient care, the aim of most ophthalmology residency programs has always been to develop fully equipped comprehensive ophthalmologists; increasingly, the surgical skills needed to perform MIGS should be included in the portfolio of the comprehensive ophthalmologist.

SELECTING A RESIDENCY PROGRAM

Applying for residency programs can be an arduous task, and trainees may be hesitant to ask about MIGS for fear that doing so may be viewed unfavorably. However, capable residency applicants will do their research and ask the appropriate questions to confirm that the programs they are seeking expose residents to the entire spectrum of comprehensive surgical training.

Although many institutions still do not offer MIGS training, the past several years have shown that MIGS is not going away, and training programs around the country are recognizing this and adapting accordingly. If driven by resident demand and the science that supports more effective patient care, the integration of MIGS into academic programs is likely to continue. I encourage residents to be the best advocates they can be for themselves and their patients through due diligence in program research.

At Kellogg Eye Center, our ophthalmology residency program includes MIGS-specific training with placement of the iStent (Glaukos), and we are working to integrate additional MIGS techniques. We believe that the ability to lower IOP and eliminate or reduce the medication burden is a substantial benefit for cataract and glaucoma patients and something that all ophthalmologists should be able to offer.

Residents should be familiar with the science behind MIGS therapies and the role of technology in improving patient outcomes and quality of life. Strong residents are those who advocate for their patients, who are aware of the science and literature available to them, and

who read related information thoroughly. When more modernized procedures become available, it is a resident's job to seek and learn the skills required to effectively utilize these technologies and evaluate them from a critical and informed perspective. Programs differ in their adoption of technology, but dedicated residents can find the training they need in any program.

MASTERING THE ANGLE

The first step in performing MIGS is getting a clear view of the anterior chamber angle. Gaining familiarity with the angle at the slit lamp with clinical gonioscopy is vital. Recognizing anatomic landmarks and the relationships between them and learning the angle of approach and how small variations of the goniolens can change the view all begin a feedback process that can result in a better and safer surgical experience.

Once residents are comfortable in the clinic, they can begin incorporating gonioscopy into any anterior segment surgery. I typically recommend that residents integrate gonioscopy with cataract surgery in a graduated approach. Residents can start with viewing the

AT A GLANCE

- Residents should be familiar with the science behind MIGS therapies and technology's role in improving patient outcomes and quality of life.
- ► The first step in performing MIGS is getting a clear view of the anterior chamber angle. Gaining familiarity with the angle at the slit lamp with clinical gonioscopy is vital.

"STRONG RESIDENTS ARE THOSE WHO ADVOCATE FOR THEIR PATIENTS, WHO ARE AWARE OF THE SCIENCE AND LITERATURE AVAILABLE TO THEM, AND WHO READ RELATED INFORMATION THOROUGHLY."

angle once incisions are made and the OVD is in the eye but prior to phacoemulsification. It is also useful to view the angle after phacoemulsification has been completed and the case is almost over; there can be subtle differences in the view as well as the "feel" of the eye.

As residents gain experience and demonstrate overall confidence and poise in the OR, they can introduce a cannula or similar instrument while maintaining a gonioscopic view. The ability to consistently obtain a good view both before and after cataract surgery and the ability to maintain

that view with instrument insertion will build the foundation needed for performing angle surgery. Strong gonioscopy skills will serve the resident later in a variety of angle surgeries.

TAKING INITIATIVE

Residents should take every opportunity to look at the angle and use the gonioscope to gain familiarity with these techniques. They typically perform hundreds of surgeries by the time they graduate, equating to multiple opportunities to become well versed in intraoperative gonioscopy and goniosurgery. If these skills are cultivated, then residents will be ready to utilize them from the first day of their postresidency work. As the MIGS space continues to grow and new devices and techniques become available, residents with a strong set of fundamentals will be able to more easily adopt and integrate new technologies.

Our predecessors did not have a choice of treatment options for glaucoma, but we do today. Therefore, it is our responsibility to offer our patients the best technologies available not only to treat the disease but also to improve quality of life. Ultimately, this is what patients want and what we, as physicians, have a responsibility to deliver.

MANJOOL SHAH, MD

- Clinical Assistant Professor, Kellogg Eye Center, University of Michigan, Ann Arbor
- manjool@med.umich.edu
- Financial disclosure: Consultant (Allergan, Glaukos)