Microinvasive glaucoma surgery (MIGS) was introduced in Europe more than 5 years ago. Since then, many papers and symposia have focused on MIGS, and overall interest in the space has grown steadily. In the beginning, the MIGS options available were mainly trabecular or suprachoroidal devices developed by small startup companies; however, the recent participation of more established manufacturers and the introduction of a growing number of treatment options have helped increase interest in MIGS.

Today, it would be unusual for MIGS not to have a presence at an Italian glaucoma meeting. There are typically scientific sessions dedicated to MIGS devices, well-attended skills courses on the various procedures, and a strong interest among attendees in learning these new surgical techniques. Unlike US surgeons, Italian ophthalmologists are not restricted to the use of MIGS in conjunction with cataract surgery and, instead, may perform MIGS as a standalone treatment. This further increases the potential number of patients who could benefit from these minimally invasive surgeries.

MIGS certainly plays a role in a range of clinical settings, from early to moderate disease to more advanced stages. From my personal experience, I know that many patients would like to undergo a safe procedure that would allow them to be free from eye drops or to achieve a lower pharmacologic burden. In addition, if their glaucoma cannot be controlled by medication, many would prefer to undergo a procedure that is less invasive than traditional surgery.

Nevertheless, if we compare the curiosity surrounding MIGS to its actual impact on the management of glaucoma patients in Italy, the results are disappointing.

CONTRIBUTING FACTORS

Several factors may help to explain why, with the relative exception of the Xen Gel Stent (Allergan), MIGS procedures are underused in clinical settings in Italy.

Mindset. Although there is a substantial amount of information on MIGS, procedures designed to achieve target IOPs in the midteens are still young compared with trabeculectomy. Many older surgeons speak of these procedures as little more than placebo, or they reserve the MIGS approach for glaucoma that can be controlled by other means, referring to the disease as glaucomini, or insignificant glaucoma. This point of view is generally stressed at local congresses, although the number of patients affected by this so-called insignificant glaucoma is much larger than those who require trabeculectomy to save their sight.

Clinicians who do not perform glaucoma surgery, on the other hand, are used to keeping patients on medications by long tradition, and they would rather add another drop than try an alternative solution. This conservative approach may be modified in certain cases, such as in patients with intolerance to topical medications, poor compliance, or side effects, but it requires a complete shift in perspective, from viewing glaucoma as a medical disease to seeing it as a surgical disease. This is difficult to achieve, especially when other issues are considered (see next sections).

Reimbursement. Although MIGS was introduced some time ago, there is still no available code (or reimbursement structure) specifically designed for MIGS in Italy. From an economic point of view this is quite strange, considering that all MIGS devices have approximately the same cost. At present, Italian surgeons who perform MIGS procedures code them as other glaucoma interventions; in turn, the reimbursement may be insufficient, making hospitals unwilling to adopt and support this type of surgery. Further, the Italian system is mainly public, and surgeons are not billed based on the type or number of procedures but rather on a monthly basis. In this situation, some surgeons...
are unwilling to learn new procedures that require additional effort in terms of training and surgical time without a financial benefit.

In addition, few Italian patients have private health insurance, and, even for those who do, the coding for private insurance is linked to that for the public system. And finally, due to the relative shortage of resources, both hospitals and surgeons tend to reserve inpatient treatment for the most severe cases, for which MIGS might not be the best option.

Marketing. As the international ophthalmic manufacturers have come into the picture, some MIGS devices have become more widely used in Italy. This trend reflects the importance of proper distribution and the use of marketing strategies to influence the market. Further, small companies may be incorrectly perceived as relatively unreliable by senior surgeons who are linked mainly to larger manufacturers. That misconception must be overcome as well.

**SUMMARY**

Although the potential for widespread use of MIGS in Italy is great, the real impact in the clinical setting today remains low. Changes in clinical perspectives and economic incentives will be necessary before wider adoption of MIGS occurs in this country.

ANTONIO MARIA FEA, MD, PhD

- Head of the Glaucoma Unit, Dipartimento di Scienze Chirurgiche, Clinica Oculistica, Università di Torino, Italy
- antoniofea@interfree.it
- Financial disclosure: Consultant (Glaukos, iStar, Ivantis); Travel grants (Allergan)