

SUPPLEMENTING DATA WITH HOME TONOMETRY

This approach facilitates better, more informed decision-making.



BY WON I. KIM, MD

The biggest change in my day-to-day practice over the past few years came with the adoption of remote IOP monitoring with the iCare Home rebound tonometer (Icare USA). The cost of the device is prohibitive for some, but a more affordable option to rent the technology to patients is available through MyEyes.

Ophthalmologists are accustomed to making decisions based on IOP measurements captured in the clinic a few times per year. IOP, however, is dynamic and fluctuates throughout the course of a single day. In some instances, the traditional approach to IOP data collection can yield an inaccurate representation of a patient's disease and lead to mismanagement.

It is not unusual to get referrals for patients whose disease is steadily progressing, with worsening visual fields despite a well-controlled IOP in the clinic. In this situation, it is often difficult to know what to do. One could conclude that the patient needs a single-digit IOP and requires trabeculectomy to achieve that

result. With trabeculectomy and a single-digit target IOP come the risk of postoperative hypotony and the unintended challenges associated with this outcome.

Use of the iCare Home would make it possible to determine whether this patient's IOP is consistently under control in the daytime but soars into the 20s or 30s mm Hg late at night or early in the morning. Access to this type of information might alter the treatment approach. Maybe the patient does not need a single-digit IOP and filtration surgery. Blunting their nighttime or early morning IOP spikes could suffice. Alternatively, perhaps selective laser trabeculoplasty could be effective, or the patient would be willing to use the FSYP OPAP device (Balance Ophthalmics) while sleeping to lower their IOP in a safe, nonsurgical manner when needed. Maybe a surgical procedure with a gentler side effect profile could be performed instead of trabeculectomy if a single-digit IOP is no longer the goal. Perhaps use of a primary tube shunt, Xen Gel Stent (AbbVie), or

AquaLumen (PLU Ophthalmic) could blunt the diurnal IOP variation while maintaining a better safety profile.

In the past, patients with glaucoma might have been asked to return to the clinic for repeat IOP measurements throughout a day to produce a rough diurnal curve. This approach is not practical for many patients. However, without a full picture of the patient's IOP, the ophthalmologist risks setting a target pressure that is unnecessarily low. They also risk overburdening the patient with more medication than necessary or recommending unnecessary surgery because the target IOP is based on insufficient data or it is unclear that an administered treatment is working as intended.

The iCare Home provides a range of IOP data in a manner that my patients find convenient. I can initiate a chosen therapy based on this information and then use home tonometry to see how the overall IOP curve has been altered. This is a much more informed way to determine the patient's maximum IOP and set an appropriate

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treatment goal. It is also a more reliable way to determine whether a treatment is achieving the desired effect. At times, glaucoma specialists need more data than can be obtained during a few visits per year. iCare Home rental is a good way to supplement those data to make better, more informed decisions. ■

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