

CORRESPONDENCE



Reliability of remote patient training for home tonometry

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ICare HOME IOP measurements should be tracked for consistency and be compared directly to GAT.

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TO THE EDITOR:

Thank you to the authors, Catriona C. Barbour-Hastie & Andrew J. Tatham, for their interesting article entitled “Teaching home tonometry using a remote video link” [1]. This article provides promising results for the future of remote patient training for home intraocular pressure (IOP) measurement to better track glaucoma progression and response to treatment. Home tonometry allows patients to reduce office visits, saving them time and minimizing their risk of COVID-19 infection [2].

However, it is worth addressing the reliability of the remote training used by the authors in their study. While patients were trained to use the ICare HOME device by a licensed optometrist and were required to fulfill a remote training course, there was very little follow-up to confirm the consistency of individual patient IOP measurements. The 16 IOP measurements by each patient over the 2-day period were not shown, further questioning the consistency of IOP measurements made during the study period. In addition, no attempt was made to confirm the reliability of the home IOP measurements through comparison to more standardized methods, i.e., Goldman applanation tonometry (GAT) or Tonopen (Reichert). The authors address this concern in their article by referring to the fluctuating nature of IOP. Although there are daily fluctuations in IOP [3], taking IOP measurements around the same time every day, or an average of the daily measurements for each patient can control for these differences. Furthermore, the majority of clinical decisions to adjust medication, intervene medically to lower IOP, or intervene surgically are often based on IOP measurements taken during office hours, which have been shown to produce minimal variation [4].

Although the reliability of GAT and ICare HOME has been shown [5], no comparison between the two modalities were made in this study, which would strengthen the reliability of the remote training used. Feedback from patients on the remote training was overall positive, suggesting that the training was patient-friendly. However, if the efficacy of the remote training is in question, the

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AUTHOR CONTRIBUTIONS

MO was responsible for the conception of the correspondence and writing and revising of the paper.

COMPETING INTERESTS

The author declares no competing interests.

ADDITIONAL INFORMATION

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