Self-tonometry feasible, acceptable for glaucoma patients

4 September 2017

For patients with glaucoma, self-tonometry is feasible and acceptable to patients, according to a study published online Aug. 31 in *JAMA Ophthalmology*. Savva Pronin, from the University of Edinburgh in the United Kingdom, and colleagues conducted an observational study to see whether patients with glaucoma can perform self-tonometry using a rebound tonometer. Intraocular pressure (IOP) was assessed using Goldmann applanation tonometry and a rebound tonometer. Patients were provided with an information sheet, received standardized self-tonometry training, and measured their own IOP under observation. Both eyes of 100 patients with glaucoma or ocular hypertension were included in the study.

The researchers found that 73 of the 100 patients met the criteria for complete success (defined by good technique and an IOP reading within 5 mm Hg of that obtained by a clinician). Six additional patients could use the device but had IOP readings >5 mm Hg different from those obtained by the clinician. Compared with the Goldmann applanation tonometer, IOP by the rebound tonometer was 2.66 mm Hg lower. Similar IOPs were obtained with the rebound tonometer by self-tonometry or investigator, with excellent reproducibility. Of the 79 successful or partially successful patients, 71 percent felt that self-tonometry was easy, with 92 percent reporting self-tonometry to be comfortable.

"Self-tonometry has the potential to improve patient engagement, while also providing a more complete picture of IOP changes over time," the authors write.

One author disclosed financial ties to Allergan and Alcon.

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