IOP control: Serial monitoring

Intraocular pressure (IOP) is only one of many diagnostic tests used to determine if a patient has one of the glaucomas. However, controlling IOP is the only successful outcome—no matter what tool is in the ophthalmic plumber's kit. As far back as the October 2003 issue of Eye World, in an article titled, “Wanted: Reliable home tonometer,” the author, Rich Daly wrote, “A take-home tonometer that could reliably measure diurnal IOP fluctuations is the missing link in attempts to control glaucoma progression.” That was over a decade ago, and today we do not have one do-it-yourself instrument that could easily be used by the patient at home to measure their own pressures. In the future, some younger OD residents may ask: “I hear that there was a time when glaucoma diagnosis and treatment relied exclusively on IOP measurements once every three months, if not just yearly…is that true?” The honest response will be, “Yes, very few if any of us did serial tonometry.” The truth is that we measure IOP infrequently, usually once every time a patient visits the office. If the IOP measurement is within an acceptable range, it will be evaluated once again after several months or, in many cases, only after years. We record the time and date, because we test at any time during the day, according to the patient's convenience and the time of follow-up visit. Even though we know that this is what usually happens today, there is wide-ranging evidence that IOP fluctuates considerably during the 24-hour diurnal variation period, may be rather different in the prone rather than sitting position, higher in the early morning hours and subject to at least three different three types of IOP fluctuations; ultrashort-term that happen in minutes; short term that occur over hours to a few days and; long term. Unquestionably, due to the variations in IOP and from evidence emerging from studies, this isn't sufficient. In most cases, we can only guess what the real IOP of the individual patient may be.

Biography

Mike Cohen served three major corporations in senior management as a professional service executive with international leadership in retail optical, corporate-affiliated eye care and managed vision care following private practice and ophthalmology administration. After retirement, he has utilized his experience, strong business and marketing orientation to develop MLC Medical, LLC; an incubator designed to innovate ophthalmic devices and understand the ever-changing needs and concerns of eye care professionals.

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