Letters

Compliments

I always enjoy Dr. Mills' comments in *EyeNet*—"Alice's Restaurant" (Opinion, May) is a classic. I hope you submit it to *The New Yorker.*

Robert L. Lesser, MD
New Haven, Conn.

What Is Laser Cataract Surgery?

Ophthalmology is a technology-driven medical specialty. As professionals, we have benefited greatly from the work of scientific designers and engineers who have brought us many wondrous tools. The rate of innovation in diagnostic capabilities and medical and surgical treatments has been very rapid over the past 30 years. The current generation of practicing ophthalmologists has shown an immediate willingness to embrace new technologies that work and provide care value.

Ophthalmology is also a profession driven by marketing hysteria. One of the newest areas of advances, and one generating the most heat and noise, is "laser cataract surgery." Sadly, in this area, marketing pressure and hysteria are far ahead of scientific study and clinical validation. We know a few things for certain about the use of femtosecond laser technology: It is vastly more expensive than phaco, it is much slower than phaco, and it is sexy from a marketing perspective. Data showing it is safer or improves outcomes lag far behind the marketing and sales of laser cataract surgery as a product.

For some surgeons, the holy grail is finding a better and less expensive way to care for their patients. For others, the holy grail is finding a way to bill a $6,000 cataract surgery with laser and multifocal lens implant technology. The mass marketing of "Laser Cataract Surgery!" has already come to some markets. The immediate question then becomes, What is laser cataract surgery? Is it using a femtosecond laser to disassemble the nucleus prior to removal with phaco? Is it using a capsulorrhexis? Is it using a laser to create the surgical incision or limbal relaxing incisions (LRI)? Does it require any or all of these things? The current marketing standard suggests that a surgeon could claim to perform laser cataract surgery if he or she uses a laser to perform some significant step of the cataract procedure. Certainly, exclusive use of the laser to vaporize and remove the cataract is not the current standard, as that technology does not exist.

The ordinary Nd:YAG laser can be used as a tool in performing modern cataract surgery. It has well-established anterior segment application for lysis of vitreous strands, anterior capsule relaxing incisions, removal of keratic precipitates from the anterior IOL surface, and posterior capsulotomy. It can be used to tattoo the cornea to identify the axis for incisions, for LRI axis or length, or for orientation of a toric IOL. It can be used, with just as much justification as a femtosecond laser, to initiate and perfectly center the anterior capsulotomy. Neither laser has been shown to provide any clinical improvements in outcome over traditional techniques.

In the following photographs, a YAG laser is used to mark the axis for LRIs and to initiate anterior capsulotomy. Was it used to perform a meaningful step of the procedure? It was indeed. Does this meet the medical standard for laser cataract surgery? Perhaps. Does it meet the marketing standard? I think it does.

Mark Johnson, MD
Venice, Fla.

Past issues are available online at www.eyenet.org/archives.

YAG LASER. YAG corneal mark, YAG anterior capsulotomy, and initial YAG capsulotomy extended with a cystitome.