

# Cataract & Refractive (& Glaucoma?) Surgery Today

I think I may be going through a midlife crisis. Everyone with this affliction approaches it differently, but I believe my strategy is unique. Most ophthalmologists buy a motorcycle or a sports car. I remain perfectly happy with my 11-year-old Land Cruiser with its 130,000 miles. The car fits my personality. I even like the crack in the windshield.

Instead, after more than 2 decades in practice, my perception of glaucoma management has suddenly changed, and—I find this difficult to admit—I now like glaucoma surgery. That confession was cathartic. To be clear, I am not talking about old-school glaucoma surgery. The last trabeculectomy I performed was during my residency. In my cornea/refractive fellowship, I was extraordinarily grateful to share my Friday afternoon, corneal surgery-induced IOP problems with the fellows on the Glaucoma Service (thank you, Lou, Jay, Mark, and Neil).

Although admittedly effective and vision-saving in the hands of the right surgeon, trabeculectomies and tube shunts are invasive procedures that, in my estimation, are both time consuming (tedious) to perform and, more importantly, have an unacceptable rate of complications that can occur either immediately following the procedure or years later. In the Tube Versus Trabeculectomy (TVT) Study, 7% of the eyes receiving a tube shunt and 10% of the eyes undergoing a trabeculectomy experienced intraoperative complications. During the first year, 34% of the eyes in the tube shunt group and 57% of those in the trabeculectomy group had postoperative complications.<sup>1</sup> My interest is in the new minimally invasive glaucoma surgeries.

One in five (or more than 600,000) patients per year coming in for cataract surgery have the comorbidity of glaucoma. Although we know that cataract surgery can lower the IOP of many glaucoma patients, a majority of them will continue to use glaucoma medications after cataract sur-

gery. Numerous studies have documented patients' poor compliance with chronically using medications such as glaucoma drops. In addition, diurnal fluctuations in IOP may stealthily compromise the vision of patients whose IOPs seem to be well controlled by medical therapy. Finally, we as cataract and refractive surgeons understand the quality of life associated with the chronic use of topical medications and the cost-effectiveness of a minimally invasive, safe glaucoma procedure that could be performed at the time of cataract surgery. A procedure that offered a lifetime of around-the-clock improved IOP control and

either a reduction or elimination of glaucoma medications would be exciting.

The common ground of cataract and refractive surgery is the rapid visual rehabilitation, technology-driven precision, safety, elegance, and efficacy that improve patients' quality of life. We are now on the threshold of welcoming a newcomer into our midst: minimally invasive glaucoma surgery. Microstents and ab interno trabeculectomies share the aforementioned characteristics of cataract and refractive surgery. Although they are new procedures (some are just now pushing through the FDA regulatory process), they will be welcome additions to the cataract surgeon's armamentarium, and we should embrace them once their efficacy has been established. ■



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1. Gedde SJ, Schiffman JC, Feuer WJ, et al. Treatment outcomes in the Tube Versus Trabeculectomy Study after one year of follow-up. *Am J Ophthalmol*. 2007;143:9-22.