Correspondence


TO THE EDITOR: Maleki et al. retrospectively evaluated the efficacy and safety of selective laser trabeculoplasty (SLT) in uveitic eyes with secondary glaucoma after intravitreal fluocinolone acetonide (IVFA) implantation. Selective laser trabeculoplasty is a simple, repeatable minimally invasive laser procedure that has been found to be noninferior to argon laser trabeculoplasty or topical medications in lowering intraocular pressure (IOP) in primary open-angle glaucoma. However, it is relatively contraindicated in uveitic eyes due to potential proinflammatory effects and the chance of inducing a flare-up of the uveitis. We commend the innovative idea by Maleki et al. and recognize the impact of their study conclusion in which SLT can be safe and effective for selected eyes with steroid-induced glaucoma (SIG) and a history of uveitis. We have a few queries and comments regarding the study population, medications used, and clinical applications of the study.

The authors applied stringent inclusion and exclusion criteria in patient selection. All patients were reported to have received SLT after sustaining IOP increase within 1 year of IVFA implantation. We are interested in receiving more information on the mean IOP before the steroid implant to decipher whether patients had simple uveitis or preexisting uveitic glaucoma from the start. The implication is 2-fold. First, this affects the study population under discussion, since SIG versus uveitic glaucoma superimposed with SIG are not directly comparable. Second, this directly affects the management of post-SLT IOP spike. The IOP increase after SLT in nonuveitic eyes has been shown to be short lived and resolves within 1 week. However, the proinflammatory nature of SLT could potentially induce uveitic flare-up in uveitic glaucoma patients who concomitantly have SIG, causing an increase in IOP. Clinicians would be caught in a dilemma in the management of the IOP spike; they may wish to suppress anterior chamber reactions to control the uveitis, but this could potentially compromise the effect of SLT, because SLT essentially works by stimulating inflammatory cytokines to decrease trabecular meshwork outflow resistance. To avoid this, it might not be advisable to generalize the findings from Maleki et al. to patients with uveitic glaucoma.

We are also interested in the number and type(s) of medications used before SLT. Controversy exists regarding the safety of selective laser trabeculoplasty or topical medications in lowering intraocular pressure (IOP) in primary open-angle glaucoma.2 However, it is relatively contraindicated in uveitic eyes due to potential proinflammatory effects and the chance of inducing a flare-up of the uveitis. We commend the innovative idea by Maleki et al. and recognize the impact of their study conclusion in which SLT can be safe and effective for selected eyes with steroid-induced glaucoma (SIG) and a history of uveitis. We have a few queries and comments regarding the study population, medications used, and clinical applications of the study.

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We are also interested in the number and type(s) of medications used before SLT. Controversy exists regarding the influence of prostaglandin analogues on SLT outcomes.3 However, no difference has been found in a previous study comparing topical steroidal versus nonsteroidal anti-inflammatory drugs in post-SLT treatment of nonuveitic eyes,4 we are curious about medications used after SLT in this population of steroid responders. Were topical steroids or nonsteroidal anti-inflammatory drugs used? If so, what was the dosing frequency and duration?

One patient did not respond to maximum tolerated medical therapy after SLT, and underwent pressure-lowering surgery 10 days later. It would be interesting to know more about the profile of this outlier: Was he or she given the same IVFA implant as the others? Does he or she have other underlying diseases that can account for the poor response? Could the IOP persistence be related to an inherent uveitic flare-up or simply a nonresponder to SLT? What was the status of the patient’s IOP control and anterior chamber activity after the filtration surgery? This outlier highlights the need for proper counseling of patient’s expectations before SLT, especially when performed in eyes with secondary glaucoma. Despite its reported high efficacy rate, response varies depending on the population and studies,5 and patients should understand the presence of a spectrum in efficacies after receiving SLT, ranging from nonresponders, short responders (who loses the SLT effect shortly), to good responders (typically more than a 20% IOP reduction from pretreatment). Patients with a history of uveitis receiving SLT should also be primed on the possible need of early glaucoma infiltration intervention in case of IOP spikes after the laser.

In conclusion, this retrospective study presents promising results to use SLT as an alternative or bridging treatment to filtration surgery in controlled uveitic eyes following IVFA-induced glaucoma. With further clarification of patients’ IOP and medication profiles, we hope to see higher translation and adaption of Maleki’s findings into everyday clinical management.

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