

Prophylactic ocular hypotensives before Nd:YAG laser posterior capsulotomy

Sir,

I read with interest the article titled “Use of topical brimonidine to prevent intraocular pressure (IOP) elevations following Nd:YAG-laser posterior capsulotomy” by Singhal *et al.*^[1] The authors have rightly highlighted the need to manage the raised IOP after Nd:YAG-laser posterior capsulotomy. However, I would like to bring to the fore a few observations.

The study groups under comparison seem to be similar at the start of the study and there is no apparent selection bias or probability of confounding, but randomization and blinding could have made the interpretation of results more reliable. If complete blinding was not feasible, the observer doing the applanation tonometry could have been masked. In such comparative studies, the sample size calculation should be elaborated a little more and the statistical test applied to analyze the data should be mentioned.

Topically instilled brimonidine reduces the IOP within 1 hour, and the effect peaks at 2–3 hours after instillation.^[2] This

pharmacokinetic explanation for giving brimonidine 1 hour before and immediately after the laser procedure would have been of interest to some of the readers. The ciprofloxacin group acts as the placebo arm in this superiority trial. Various drugs used in glaucoma such as acetazolamide, timolol, pilocarpine, apraclonidine, and so on, including brimonidine, have been the preventive therapy with established efficacy for such post laser IOP spikes since many years now. But there would not have been any strong ethical dilemma of using a hypotensive instead of ciprofloxacin, since this kind of acute IOP elevation usually resolves without any sequelae in previously normotensive eyes.^[3]

Prostaglandin analogues like latanoprost, travoprost and bimatoprost are currently the first line of treatment for glaucoma and ocular hypertension.^[4] These drugs may be the better options for preventing post laser IOP elevations as well. Not many studies have been conducted to assess their efficacy in this regard. One study has claimed bimatoprost to be superior to brimonidine in preventing such rise of IOP.^[5] More such

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studies will help in establishing the efficacy of prostaglandin analogues and other newer drugs in prevention of IOP spikes following Nd:YAG-laser posterior capsulotomy.

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