Nuances of using intraoperative dexamethasone implant in patients of diabetic retinopathy undergoing cataract surgery

Dear Editor,

We would like to thank the author for reading our article and bringing up interesting points for discussion. The author has raised several aspects worthy of discussion related to our manuscript. Our study[1] was a randomized controlled trial including patients of diabetic retinopathy undergoing cataract surgery, with two treatment arms consisting of dexamethasone implant group, which received combined phacoemulsification with intraocular lens (IOL) implantation and dexamethasone implant (Ozurdex®), and a standard arm of phacoemulsification with IOL implantation with no dexamethasone implant.

In the exclusion criteria, we did mention that patients with media haze were excluded from the study. Patients with various degrees of visually significant cataract are expected to have certain degree of haze, but this criterion pertained to clinical fundus examination. Patients with media haze precluding the view of the fundus were excluded from the study. It is correct that patients with both treatment naïve diabetic macular edema (DME) and recalcitrant cases may have been included in the study. Since most cases of recalcitrant DME are usually treated for their retinal disease prior to cataract surgery, it is unlikely that those patients were included in either arm. However, this is a limitation of our study, and analysis of treatment strategies in treatment naïve versus recalcitrant cases needs further assessment in the future.

The aim of the study was not to assess the treatment for DME itself, as there are several clinical trials published in this regard. Our study was an expansion of the proof-of-concept study published in 2012, wherein dexamethasone implant was injected in eyes with background retinopathy undergoing phacoemulsification and IOL implantation (not necessarily having DME at the time of surgery). Our study did not aim to rationalize the use of dexamethasone implant in patients of diabetic retinopathy and no DME, but in a highly specific situation – using it intraoperatively in patients with diabetic retinopathy undergoing cataract surgery. Therefore, as our proof-of-concept study also suggested, there is no over- or aggressive treatment in the protocol. On the other hand, patients with preexisting DME in the standard arm were followed regularly, and they were offered rescue treatment at follow-up visit of 4 weeks and 12 weeks after cataract surgery. The criteria for rescue treatment were not strict, and patients were treated if the macular thickness exceeded more than 100 microns than the baseline. Thus, it may not be fair to say that patients in the standard arm were undertreated.

Finally, randomizing patients after cataract surgery would defeat the purpose of the study, since the intravitreal injection was given intraoperatively, during the procedure. We observed that a simultaneous intravitreal dexamethasone implant with phacoemulsification allows a good postoperative recovery and significantly reduced macular thickness, with better visual outcomes.

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Conflicts of interest

There are no conflicts of interest.

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implant in patients of non-proliferative diabetic retinopathy undergoing phacoemulsification: A randomized controlled trial. Indian J Ophthalmol 2021;69:3263-72.

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