Review of: "A trabecular micro-bypass stent combined with phacoemulsification efficiently reduces intraocular pressure in open angle glaucoma in Mexican population"

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Potential competing interests: No potential competing interests to declare.

In this case series, the authors follow 26 patients with open-angle glaucoma who undergo combined iStent inject implantation and phacoemulsification through 6 and 12 months. They report that this combined procedure has “great” efficacy and improves visual acuity, reduces IOP, and reduces the need for postoperative antihypertensive medications. They also report significant associated corneal endothelial cell loss.

These findings are consistent with previously published randomized-controlled trials that report long-term reductions in IOP (Kozera et al, *Ophthalmic Res*, 2020) and improved refractive outcomes (Ioannodis et al, *Clin Ophthalmol*, 2020) with iStent inject implantation. However, their observation of moderate corneal endothelial cell loss contradicts prior reports describing preservation of corneal endothelial health with this combined procedure (Ahmed et al, *Am J Ophthalmol*, 2023).

Overall, the paper is not novel, and the results and discussion are oversimplified and lack detail. For example, the authors divide their patient population into control and case groups in the abstract, but no distinction is made between these two groups in the results or discussion. Similarly, the authors report improvements in visual acuity in the abstract, but there is no further elaboration on this finding in the text. Moreover, the patients describe a 14.5% average reduction in IOP (from ~14 mmHg to ~12 mmHg) as a strong hypotensive effect. In my opinion, this reduction can hardly be described as strong. An average postoperative corneal endothelial loss of 500 cells is also quite significant and should be discussed by the authors. It is also unclear if the study is prospective or retrospective in nature.

This study would be improved by addressing the above points. Inclusion of mean IOP values and visual acuity/field data before and after the procedure should also be included. The strengths and weaknesses of the study, in addition to future directions, should be incorporated into the discussion. A discussion of cost-benefit analysis as it relates to the institutional preference of using resident physicians would likely improve the manuscript. Most importantly, increasing the sample size and proceeding with a randomized-controlled study design would improve the quality of the findings. At this time, the significance of the conclusions need to be toned down considering the small sample size, the relatively short follow up period, and the lack of a control group.

I believe this manuscript cannot be accepted for publication in its current form unless substantial improvements are made.