



WE WOULD LIKE TO THANK SRIDHAR AND ASSOCIATES FOR their interest in our recently published article on *Nocardia* endophthalmitis.<sup>1</sup> We agree with the readers' observations that exogenous and endogenous *Nocardia* endophthalmitis represent 2 different clinical entities. We did not deem it appropriate to discuss that in detail in our manuscript for want of numbers in the endogenous endophthalmitis subset.

With respect to the 3 cases of endogenous *Nocardia* endophthalmitis that we reported in our series, 2 cases grew *Nocardia* from the vitreous sample only, while 1 of them grew *Nocardia* from the subretinal space requiring a subretinal biopsy (clinically presenting with a subretinal abscess). None of them had any antecedent history of systemic illness, intravenous fluid administration, or an in-patient hospitalization course. We agree with the readers' point on postinjection upright head positioning after injecting amikacin intravitreally, and we follow the same protocol. We would once again thank the readers for their positive comments on our article.

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CONFLICT OF INTEREST DISCLOSURES: SEE THE ORIGINAL article for any disclosures of the authors.

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#### REFERENCE

1. Dave VP, Pathengay A, Sharma S, et al. Diagnosis, clinical presentations and outcomes of *Nocardia* endophthalmitis. *Am J Ophthalmol*. <https://doi.org/10.1016/j.ajo.2018.09.007>. 2018.09.18.
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## Comparing Outcomes of Phacoemulsification With Femtosecond Laser-Assisted Cataract Surgery in Patients with Fuchs Endothelial Dystrophy



EDITOR:

IN THEIR RECENT ARTICLE, YONG AND ASSOCIATES concluded that femtosecond laser-assisted cataract surgery

was superior to conventional phacoemulsification in eyes with Fuchs endothelial corneal dystrophy (FECD) based on lower postoperative corneal endothelial cell loss, "which translates to a lower risk of corneal decompensation."<sup>1</sup> We have serious concerns about the methodology of this study, and therefore about the conclusions drawn. As acknowledged by the authors, the design of their study was weakened by its retrospective nature, including variable follow-up, selection bias, and multiple surgeons with varying levels of experience. Key omissions in the article were defining the severity of FECD<sup>2,3</sup> and explaining why 125 of 265 eyes with FECD were excluded. Did the excluded eyes all have intraoperative complications or could preoperative endothelial cell density not be measured?

To best answer the question being asked in their study, Yong and associates should have used a more appropriate outcome measure than endothelial cell density, which cannot be accurately measured in FECD.<sup>4</sup> The authors stated that the diagnosis of FECD was made clinically by slit-lamp examination and defined by the "presence of confluent central guttata with or without corneal edema." By definition, when guttae have reached central confluence, there are no discernible central endothelial cells in images of the endothelium.<sup>5</sup> So how did the authors quantify endothelial cell density in these eyes? And why did eyes with corneal edema not receive endothelial keratoplasty? Even when guttae are nonconfluent and endothelial cells are visible by specular<sup>6</sup> or confocal microscopy, measuring endothelial cell density in these eyes is subject to significant variation.<sup>4</sup> Sampling errors are introduced because of regional variation in endothelial cell density from the center to the periphery of the cornea. Furthermore, to estimate endothelial cell density when guttae are present requires a standardized analysis method with assumptions,<sup>4</sup> because endothelial cell analysis methods commonly used in corneas without guttae<sup>6</sup> will yield very different cell densities from different regions of the same image.<sup>4</sup>

Yong and associates did not report any details about their endothelial imaging and analysis other than the type of microscope. Investigators should report the region of endothelial imaging (central vs other), image quality, the number of images analyzed, the number of cells counted, the number of observers and interobserver variation, and whether images were randomized and masked when analyzed.<sup>6</sup> Most importantly, investigators should report their specific image analysis method.<sup>6</sup> Better outcome measures for this and other such studies of FECD would be progression to keratoplasty and objective indicators of progressive corneal edema, such as corneal thickness.<sup>2,3</sup> The issues described therefore cast significant doubt over the conclusions made by Yong and associates.

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