

Comment on: Pars-plana fluid aspiration for positive vitreous cavity pressure in anterior segment surgeries

Sir,

We read the interesting article "Pars plana fluid aspiration for vitreous cavity pressure in anterior segment surgeries" by Kuriakose *et al.* published in Issue 4 of the Indian Journal of Ophthalmology (IJO), 2018. The authors proposed a novel surgical technique to address a complex and vexing intraoperative complication commonly encountered in anterior segment surgeries.^[1]

The authors proposed this surgical technique for patients with shallow anterior chamber due to positive vitreous pressure, the causes of which could be poor akinesia, inadvertent pressure on the globe, proptosis, eyelid abnormalities, etc.^[2] When these external causes are ruled out, infusion misdirection syndrome is another entity where there is misdirection of irrigating fluid into vitreous cavity that can occur due to excessive hydrodissection or during cortical aspiration.^[3] Though the authors have ruled out external causes such as lid speculum issues, hand position and instrument position, one of the most important causes was missed, i.e., the type of local anesthesia and its adequacy. There were also no details regarding suspected infusion misdirection intraoperatively. Although it was mentioned that the aspiration was done before the surgery in patients where an aqueous misdirection was suspected, we are not sure if they intended that to be in cases with high possibility of aqueous misdirection intra/postoperatively as it happens post surgery and needs ultrasound biomicroscopy (UBM) for confirming the diagnosis.^[4]

Half of the patients included in the study were above the age of 60 years, in whom the possibility of vitreous degeneration was high and aspiration of misdirected fluid alone was debatable. When we consider the safety issues of this technique, the authors suggested to continue aspiration till the syringe exits out of the eye, which could possibly cause

damage to the pars plana. Incidence of complications with this procedure such as vitreous traction has been compared to that of intravitreal injections, but it may not hold true as fluid is aspirated with this technique compared to injection of fluid in the latter. In addition, an incorrect positioning of the needle increases the risk for lens touch and retinal breaks in addition to risk of damage to the pars plana. Currently available advancements including suture-less vitrectomy with 27 or 25-gauge needle would be safer alternatives.

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Conflicts of interest

There are no conflicts of interest.

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