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Reference

1. Busin M, Leon P, Nahum Y, Scorgia V. Large (9 mm) deep anterior lamellar keratoplasty with clearance of a 6-mm optical zone optimizes outcomes of keratoconus surgery. *Ophthalmology*. 2017;124:1072-1080.

REPLY: We thank Drs Nagpal and Krishna Vaddavalli for their interest in our work. In the study, we enrolled only patients with advanced keratoconus who were intolerant to contact lenses; the preoperative mean keratometry was 54.5 ± 8.6 diopters, and the average thinnest corneal point measured 381.7 ± 75.3 μm . The rationale for performing a 9-mm lamellar graft is to include the whole ectatic tissue, regardless the site and/or extension of ectasia; for this reason, preoperative features of the cone or intraoperative modification of the surgical technique (size of trephination or its decentration) were not considered or required.



Although initially the posterior corneal curvature is strongly affected by the procedure, thus possibly inducing higher order aberrations, our study shows that it is back to a regular shape within 1 year of surgery. We do not believe that visual recovery can be affected by these modifications; in fact, in our study we reported how performing a 9-mm lamellar graft allows to reduce the low-order aberrations (low-degree and more regular astigmatism), which account for approximately 90% of the total aberrations in the eye.¹

In our opinion, measuring contrast sensitivity in these patients in mesopic conditions would not add any useful information; even in normal eyes, the quality of vision rapidly declines in mydriatic conditions, because the effect of spherical aberrations increases according to the fourth power of the pupil diameter, and therefore doubling the pupil diameter increases the spherical aberration by 16 times.²

Although pupil size may vary under anesthesia, the use of an intracameral cholinergic solution can restore physiologic miosis, thus allowing easy centration of the Descemet membrane baring in the central, optical zone. In addition, also with conventional 8-mm penetrating or lamellar grafts, the extension of the optical zone is much smaller than the size of the graft, mainly because of the distortion caused in the peripheral part of the cornea by the presence of sutures or surgical scar.

Finally, we agree with the authors that in allergic patients and in the presence of vascularized corneas, that is, after prolonged contact lens wear, interrupted sutures may be a better option; furthermore, in these cases topical steroidal therapy should be prolonged until all the sutures have been removed.

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References

1. Lombardo M, Lombardo G. Wave aberration of human eyes and new descriptors of image optical quality and visual performance. *J Cataract Refract Surg*. 2010;36:313-331.
2. Applegate RA, Thibos LN, Hilmantel G. Optics of aberroscopy and super vision. *J Cataract Refract Surg*. 2001;27:1093-1107.

Re: Yamane et al.: Flanged intrascleral intraocular lens fixation with double-needle technique (*Ophthalmology*. 2017;124:1136-1142)



TO THE EDITOR: We would like to congratulate Yamane et al¹ for their article. It is interesting to note that a special variety of a 30-gauge needle (thin wall) was used to thread the haptic, which is not available in our country. The regular 30-gauge needle has an inner diameter smaller than the diameter of the haptic. We have been doing flanged intraocular lens fixation ourselves over the past few months after its popularity in the American Society of Cataract and Refractive Surgery Congress in 2016. We have encountered some difficulties in reproducing the results claimed. First, the haptic does not always flange as shown in the video. It either melts or gets distorted. We use intraocular lenses with haptics made of polymethylmethacrylate material. Yet another complication we have been seeing quite frequently is the extrusion of the haptic. In the postoperative period, the haptic and flange protrude out of the sclera, necessitating repositioning. It is surprising to note that the authors have not encountered even a single case of the same.

We would like to suggest a small modification to the technique to ensure better safety during the manipulation of the trailing haptic. We suggest the leading haptic be exteriorized before the trailing haptic is manipulated into the needle. To avoid intraocular haptic rebound, the leading haptic could be secured with a silicone stopper.² Leaving a sharp needle in the ciliary sulcus close to the vitreous base while the rest of the intraocular lens moves may carry the risk of peripheral retinal injury and haptic slippage.