To our knowledge, there are no studies that look at the long-term scarring or discomfort from the conjuctival incision in standard sub-Tenon's anaesthesia. Future studies looking at this and comparing scarring with incisionless techniques may further make the case for transitioning to incisionless techniques.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Indications for explant of implantable collamer lens

Implantable collamer lens (ICL) (Visian, STAAR Surgical Co., CA, USA) is a posterior chamber phakic intraocular lens (pIOL) that was FDA approved in 2005 for the correction of moderate-to-high myopia.[1] ICL explant may rarely be needed in the event of complications related to inappropriate vaulting and its consequences. [2–4]

We herein evaluated the indications for ICL explant over the last 3 years in our institution. Ethical clearance was obtained from the institutional review board. Eleven cases underwent ICL explant, and the demographic details of the cases, indications for explant, and visual and anatomical outcomes have been summarised in Table 1. Reasons for ICL explant were chipped haptic of ICL during insertion (1 out of 11), first-stage ICL explant with phacoemulsification before vitreoretinal surgery (2 out of 11), silicon-oil-induced cataract (1 out of 11), inverse ICL with cataract & retinal detachment (1 out of 11), post-traumatic ICL dislocation with anterior subcapsular cataract (1 out of 11), nuclear sclerosis (1out of 11), anterior subcapsular cataract with shallow vault (1 out of 11), high vault with raised intraocular pressure (1 out of 11), shallow vault with recurrent uveitis (1 out of 11), and acute post-operative endophthalmitis (1 out of 11).

Zeng *et al* observed an incidence of 2.6% (16 out of 616) for pIOL exchange, with low vaulting (≤100 μm) leading to cataract in 50% cases, and too high vaulting (≥1000 μm), leading to raised IOP in 50% cases.[2] In contrast, we performed ICL exchange in only two cases because of inadequate vault. Shallow vault resulted in anterior subcapsular cataract in one case, and excessively high vault led to raised IOP in another case.

The reported incidence of post-ICL cataract is 5.2%.[3] In our series, a concomitant phacoemulsification with IOL implantation was performed in 63.6% (7 out of 11) cases. Of these, 57.1% cases (4 out of 7) required phacoemulsification to facilitate subsequent retinal surgery. Corrected distance visual acuity was 20/25 or better in 63.6% (7 out of 11) eyes, and all cases with suboptimal visual outcome had coexisting posterior segment pathology (4 out of 11).

Retinal detachment after ICL implantation is attributed to high myopia, and may be observed in 0.57–1.75% cases.[3] We observed retinal detachment and its sequelae in 36.4% (4 out of 11) cases, which required both ICL explant and phacoemulsification.

Visual rehabilitation is challenging in cases with ICL explant in one eye, with the crystalline lens *in situ*. We performed ICL exchange in two cases (chipped haptic and extremely high vault). A repeat ICL implantation was performed in the case with post-operative endophthalmitis 9 months after the successful resolution of endophthalmitis.[5] However, in the case with uveitis, a repeat ICL implantation was not feasible in view of recurrent inflammatory episodes, and the patient was prescribed contact lens.

We implanted 714 ICLs over the last 10 years. In our case series with 11 cases of ICL explant, 6 cases had undergone a primary ICL implantation in our centre (Table 1).

To conclude, the indications of ICL explant can be varied. Cataract necessitating phacoemulsification is one of the major causes of ICL explant, especially in cases associated with posterior segment pathology. A low incidence of vault related complications was observed, with only 18.2% (2 out of 11) eyes requiring ICL explant for extremely high or shallow vault.

Conflict of interest

The authors declare no conflict of interest.

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Table 1 Demographic details, indications for explant and outcomes in cases undergoing ICL explant

S. no	*Age (yrs)*	*Sex*	*ICL model*	*Duration till explant*	*Preop specular (cells/mm²)*	*Preop CDVA*	*Preop vault (μm)*	*Indication for explant*	*Phaco+ IOL*	*Additional surgical intervention*	*Postop CDVA (last follow-up)*	*Postop Specular (cells/mm²) (last follow-up)*	*Follow-up (months)*
1[a]	42	M	V4	7 yrs	1980	CF at 1 m	350	Rhegmatogenous retinal detachment	Yes	Vitreoretinal surgery	20/70	1870	18
2[a]	39	F	V3	10 yrs	2022	HMCF	545	Rhegmatogenous retinal detachment	Yes	Vitreoretinal surgery	20/200	1790	12
3[a]	26	M	V4	3 yrs	2250	CF at 1 m	22	Inverse ICL+rhegmatogenous retinal detachment+anterior subcapsular cataract	Yes	Vitreoretinal surgery	20/70	1971	35
4[a]	30	F	V4	5 yrs	2190	HMCF	410	Silicon-oil induced cataract	Yes	Silicon-oil removal	20/40	2085	18
5	40	M	V3	10 yrs	2210	HMCF	NR	Post-traumatic ICL dislocation with anterior subcapsular cataract	Yes	—	20/25	2095	13
6	42	M	V3	9 yrs	2145	20/200	355	Nuclear sclerosis	Yes	—	20/20	2075	24
7[a]	32	M	V3	3 yrs	2731	20/40	100	Anterior subcapsular cataract with shallow vault	Yes	—	20/20	2671	28
8	24	M	V4c	<5 min	2500	20/20	NR	Chipped haptic	No	ICL exchange	20/20	2450	26
9	26	F	V4c	3 days	2645	20/20	1350	High vault with appositional angle closure	No	ICL exchange with smaller size ICL	20/20	2560	14
10	28	F	V4	1 yr	2400	20/40	72	Shallow vault with recurrent uveitis	No	Contact lens	20/20	2250	12
11	29	M	V4c	1 week	2883	HMCF	405	Acute endophthalmitis	No	Intravitreal antibiotics+Re-implantation of ICL	20/20	2694	30

Abbreviations: CDVA, corrected distance visual acuity; CF, counting fingers; F, female; HMCF, perception of hand movements close to face; ICL, implantable collamer lens; IOL, intraocular lens; M, male; NR, not recorded; phaco, phacoemulsification; postop, post-operative; preop, preoperative; yrs, years; 1 m, 1 meter.[a] Cases referred from other centres.

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Sir,
Fuchs endothelial corneal dystrophy and macular drusen: evidence for coincidence?

The corneal endothelium and the retinal pigment epithelium represent monolayers of postmitotic polygonal cells of neuroectodermal origin with barrier and transport function. Fuchs endothelial corneal dystrophy (FECD) and age-related macular degeneration (AMD) show interesting similarities including cellular degeneration with deposition of PAS-positive extracellular matrix (ECM) in the form of guttae and drusen occurring preferentially centrally in close proximity to the ocular light path (Figures 1a and b). Risk factors for both entities include advanced age, cigarette smoking, and female gender. In this study, we aimed to evaluate if an increased presence of macular drusen may be found in FECD patients to support a hypothetical association between both entities.

Consecutive FECD patients undergoing Descemet membrane endothelial keratoplasty (DMEK) surgery were compared to consecutive control patients without corneal pathology regarding the presence of macular drusen using standardized spectral domain-optical coherence tomography (SD-OCT) and near-infrared reflectance (NIR) analysis (Spectralis HRA +OCT; Heidelberg Engineering GmbH, Heidelberg, Germany; Figures 1c and d) by three masked investigators (AC, EE, MM). OCT imaging specifications: scan area 20° × 15°, centered on fovea, 37 parallel OCT B-scans (distance between B-scans ~120 μm), 20 images averaged per B-scan. NIR specifications: $\lambda = 830$ nm; field of view 30° × 30° centered on fovea, image resolution 768 × 768 pixels. An eye was considered as 'drusen-positive' if at least one druse was detected on at least one OCT B-Scan and confirmed using the NIR image. Owing to the dependency in the data structure, as both eyes per patient were examined, the effect of FECD, age, gender and previous cataract surgery on drusen was modeled with generalized estimating equations (GEE).

Patient demographics are shown in Table 1. SD-OCT/NIR analysis revealed macular drusen in 66 of 213 FECD patients (31%) (110 of 396 FECD eyes (28%)) and in 51 of 181 normal cornea control patients (28%) (74 of 324 normal cornea control eyes (23%)). There was no significant impact of FECD on the presence of drusen of the macula (OR = 1.441; CI: 0.902–2.302; $P = 0.126$; Figure 1e). The presence of drusen was age-dependent in both groups (OR = 1.094; 95% CI: 1.064–1.124; $P < 0.001$; Figure 1f). Gender (OR = 0.729; 95% CI: 0.458–1.160; $P = 0.183$) and previous cataract surgery (OR = 1.192; 95% CI: 0.751–1.892; $P = 0.456$) did not show any significant association.

Our data confirm the general age-dependent presence of macular drusen.[1] However, we did not find any correlation between macular drusen and FECD. These results are supported by earlier results from the Reykjavik eye study which also reported no increased prevalence of age-related macular degeneration in citizens of Reykjavik, Iceland, 55 years and older with primary central corneal guttae.[2] Rao *et al*[3] were able to demonstrate a relationship between FECD and AMD using slit lamp biomicroscopy and indirect funduscopy. The diverging outcome between studies may at least in part be related to different patient cohorts and grading methodology. Future validation studies should include a prospective design, simultaneous SD-OCT, funduscopic, and potentially fluorescence angiographic analyses that would facilitate to focus more specifically on distinct stages and on distinct subtypes of drusen such as reticular pseudodrusen or basal laminar drusen.

Conflict of interest

The authors declare no conflict of interest.

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