We opted for conservative management, after which the DM detachment spontaneously resolved and corneal thickness improved.

DM detachment is an uncommon late complication of PK and pathophysiology is thought to be mechanical due to a retrocorneal membrane, or due to recurrence of corneal ectasia. The majority of published cases underwent surgery with air, SF6, or C3F8 with postoperative supine positioning, or progression to repeat PK or DSAEK if this initial treatment fails. Topical steroids can be given for conservative management.

Conclusion Conservative management of DM detachment can be an option for patients with guarded prognosis, or in small detachments with no tears. Our case provides another data point on the presentation and progression of this complication to the small number of case reports in the literature.

Abstracts

P-14 DESCemet STRIPPING ENDOTHELIAL KERATOPLASTY VERSUS DESCemet MEMBRANE ENDOTHELIAL KERATOPLASTY: 5-YEAR GRAFT SURVIVAL AND ENDOTHELIAL CELL LOSS IN PATIENTS WITH FUCHs’ ENDOTHELIAL DYSTROPHY

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Objective To compare endothelial cell loss, graft survival, and clinical outcomes in patients with Fuchs’ endothelial dystrophy (FED) up to 5 years after Descemet stripping endothelial keratoplasty (DSEK) and Descemet membrane endothelial keratoplasty (DMEK).

Methods 318 consecutive DSEK (n=189) and DMEK (n=129) grafts of 223 patients performed by 8 surgeons with standardised protocols between January 2006 and October 2021 were analysed. Group differences were compared with parametric and non-parametric tests. Kaplan-Meier analysis and Cox regression were conducted for graft survival and identify graft failure and rejection risk factors.

Results At 5 years, graft survival was 97% and 98% (p=0.370) in DSEK and DMEK eyes. Mean percentage endothelial cell loss was 56.6±17.6 in DSEK and 55.6±15.2 in DMEK eyes (p=0.865). Mean BSCVA was 0.12±0.13 LogMAR in DSEK and 0.00±0.17 in DMEK grafts (p<0.00001) at 5 years postop. Within 5 years, 12% of DSEK and 9% of DMEK eyes developed allograft rejection (p=0.412). Rebubble was performed in 9.0% of DSEK and 2.3% of DMEK grafts (p=0.211). Cox regression identified rejection episode (HR 1.36; 95% CI: 2.31–80.22 (p=0.004)) as a significant contributing factor for graft failure.

Conclusions At 5 years there was no significant difference in graft survival or endothelial cell loss between DMEK and DSEK eyes with FED. We propose that our standardised technique reduces the need for rebubbling. DMEK had superior visual acuity outcomes compared with DSEK in these patients up to 5 years after surgery.

P-15 UTILISING ENDOTHELIAL MIGRATION TO PERFORM DEEP ANTERIOR LAMELLAR KERATOPLASTY IN EYES WITH DEEP POSTERIOR CORNEAL SCARRING TYPICALLY TREATED WITH PEnETRATING KERATOPLASTY

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Objective To describe a novel technique for deep anterior lamellar keratoplasty (DALK) in patients central corneal perforation and deep scarring making conventional DALK (Melles or Big Bubble) unviable. A posterior Descemet’s membrane (DM) skirt has provided an adequate scaffold for the migration of the host endothelial cells.