

a PI would eliminate PI-related complications, while saving on cost and resources.

P-16 REFRACTIVE OUTCOMES OF PATIENTS UNDERGOING COMBINED DESCemet'S MEMBRANE ENDOTHELIAL KERATOPLASTY AND PHACOEMULSIFICATION SURGERY

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Background Combining cataract surgery with Descemet's membrane endothelial keratoplasty (DMEK) surgery compared to staged surgeries provides a cost-effective method with faster visual rehabilitation and is more convenient for the patient. However, the combined procedure can lead to a refractive shift that can be difficult to predict. We aimed to assess the refractive outcomes of our patients.

Methods All patients who underwent combined DMEK procedures with phacoemulsification and insertion of IOLs between January 2016 and October 2022 were identified using the Medisoft audit tool. Data including demographics, keratometry, postoperative refraction and refractive aim were obtained.

Results Twenty eyes which underwent combined procedure for Fuchs' endothelial dystrophy were included. The average age was 72.4 years (range 60–95) and 70% were female (n=14). Eighteen (90%) of patients had improved visual acuity postoperatively with a mean improvement of 0.4 LogMAR overall. The average change in predicted outcome was a hyperopic shift of +0.55D (range -0.99 to +2.49D) with 65% (n=13) of patients achieving a more hyperopic outcome than aimed for. Three patients who achieved +1.50D over the predicted outcome had steeper K-readings of >46D, however, there was no other significant difference in K-readings between the patients who achieved a more myopic outcome and those that achieved a hyperopic outcome.

Conclusion Refractive outcomes of patients undergoing combined cataract and DMEK surgery can be unpredictable. We suggest aiming for a more myopic target (such as -1.00D instead of -0.50D) in these patients may better protect against an unfavourable hyperopic outcome particularly in this age group.

P-17 AN INNOVATIVE TECHNIQUE FOR PRACTISING PEELING OF DONOR DESCemet'S MEMBRANE FOR DESCemet'S MEMBRANE ENDOTHELIAL KERATOPLASTY

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Purpose To evaluate the feasibility of residual corneoscleral buttons after primary surgery for practising the donor tissue preparation for Descemet's membrane endothelial keratoplasty (DMEK) by trainees and fellows.

Methods Fellows with zero experience in DMEK used 5 residual corneoscleral buttons after DSAEK surgery (central 8 mm graft was punched during the primary surgery), to practice donor Descemet's membrane peeling. A 9.5 mm donor punch was used for partial cutting of the residual button after staining it with brilliant blue G for 1 minute. 360° stripping of Descemet's was practised under a balanced salt solution.

Result Fellow successfully peeled 360° Descemet's membrane in 3 out of 5 residual corneoscleral buttons.

Conclusion Residual corneoscleral button is an excellent source to practice donor Descemet's membrane peeling for DMEK. This technique can provide cost-effective and easily available platform to the trainees and fellows for gaining skills and practising graft preparation without the fear of financial loss or surgery deferment in case of tissue loss or damage.

P-18 'NO NONSENSE' DMEK: SAFETY AND EFFICACY OF POSTURELESS DMEK WITH DEFERRED POST-OPERATIVE REVIEW UNTIL ONE WEEK

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Purpose To evaluate the clinical results of postureless (no intraoperative or postoperative posturing) Descemet's membrane endothelial keratoplasty (DMEK) with the first postoperative review conducted at one week.

Design Retrospective, noncomparative, interventional case series.

Participants 17 consecutive eyes of 17 patients requiring DMEK with PI for any cause of endothelial failure.

Intervention DMEK was performed with an intraoperative inferior PI and a near total fill of SF6 (20% concentration). After filling the anterior chamber with gas there was no intraoperative tamponade time; at the conclusion of surgery the patient was sat up in theatre and an external eye examination was performed to confirm the gas meniscus was above the PI. The patient was allowed home immediately with no instructions to posture at home and the next scheduled review occurred at day 7.

Main Outcome Measures Rate of any postoperative complications, including any unplanned visits or intervention between day 0–7, graft detachment, rebubbling and primary failure rates.

Results There were zero additional or unplanned visits or interventions. No pupil block or Urrets-Zavalía syndrome occurred. No complications occurred other than partial (<1/3 DMEK surface area) detachment in the first month in 3/17 (17.6%) of which a rebubbling was performed in 2 (11.8%). Each of those required one rebubbling, after which total graft attachment was achieved. There were no cases of primary graft failure.

Conclusions This small series highlights that DMEK surgery can be safely performed with less demands of patients in the postoperative period for hospital reviews or of posturing.