required repeated tissue debridement with amniotic membrane grafting to preserve the eye integrity.

Conclusions The severity of our observation was associated with a co-existing immunocompromised state and appeared similar to findings associated with other orthopoxviruses. Ophthalmic manifestations could be the initial presentation of human monkeypox and could also be severe. Early recognition and intervention may limit the likelihood of substantial ocular morbidity.

P-13 TOPICAL INSULIN EYE DROPS IN INFECTIVE KERATITIS

1Davide Romano*, 2Stephanie J Tieu, 3Tariq Mohammad. 1Leicester University Hospitals NHS Trust, Leicester, UK; 2Royal Liverpool University Hospital, Liverpool, UK

*Correspondence, Davide Romano: davide.romano.md@gmail.com

Introduction Topical insulin eye drops have been shown to promote corneal epithelium healing in case of persistent epithelial defect (ED), especially in neurotrophic cases. The use of insulin eye drops in other infectious keratitis is limited in the literature. The aim was to evaluate whether insulin eye drops may be useful in case of ED in infective keratitis.

Methods 5 patients with culture proven infective keratitis and ED were recruited. The infections were: HSV-1 (n=1), Pseudomonas aeruginosa (n=2), Acanthamoeba (n=1) and Stenotrophomonas maltophilia (n=1). Each patient was commenced on daily topical insulin at a concentration of 1 units/ml (Humulin S in lubricant eye drops), 1 drop four times a day for 30 days. Evaluation of the ED was performed at slit-lamp, measuring the horizontal and vertical margins of the ED, at baseline, and week 1,2,3 and 4. Resolved ED was defined as no fluorescein staining present at follow-up.

Results Complete healing of the ED occurred only in the case of previous HSV-1 keratitis. The patient was noted to not be using any other topical treatments other than insulin eye drops. In the other 4 cases, the ED was still present at week 4, albeit reduced to 80% of the original size. We observed that in these 4 cases, the patients were still using topical steroids and/or topical antibiotics and/or topical polyhexanide.

Conclusion Insulin eye drops may be helpful in cases of post-infective keratitis ED and non-concomitant use of any other drops, which may interfere or cause epithelial toxicity.

P-15 DESCemet’s Membrane Endothelial Keratoplasty Without Peripheral Iridotomy: Outcomes and Safety Profile (Category: Research)

Liam Price*, Radhika Patel, Mukhtar Bizrah, Ali Mearza. Western Eye Hospital, London, UK

*Correspondence, Liam Price: liam.price@nhs.net

Objective Pupil block with raised intraocular pressure (IOP) is a serious complication of Descemet’s membrane endothelial keratoplasty (DMEK). To reduce the risk of pupil block, many surgeons perform a peripheral iridotomy (PI) before or during the procedure, which itself carries a risk of complications. This study demonstrates the outcomes of a method which does not require a PI.

Methods Retrospective, single centre study of DMEK performed under two surgeons. A PI is not made either before or during the surgery as part of their standard technique. Gas is released post-procedure as required in order to avoid iatrogenic pupil block.

Results Fifty-seven consecutive cases of DMEK between January 2018 to August 2021 were included. Fourteen of these cases were combined with phacoemulsification. There were no cases of raised IOP secondary to pupil block in the postoperative period. Three cases of raised IOP were attributable to a history of glaucoma and steroid response. At one year, there was a mean improvement in best-corrected visual acuity (BCVA) of LogMAR 0.44, from a baseline of LogMAR 0.66. The rebubbling rate was 30%, including partial and complete detachments. There was one case of primary graft failure.

Conclusion DMEK without a PI is a safe and effective alternative technique when combined with gas bubble management in the immediate postoperative period. Avoiding the need for...
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

Radhika Patel*, Liam Price, Ali Meeara, Mukhtar Bizrah. Western Eye Hospital, London, UK

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*Correspondence, Radhika Patel: radhika.patel6@nhs.net

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 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

1Shakeel Ahmad*, 2James Myerscough, 3Muhammad Haseeb, 4Harry Roberts, 5Royal Devon and Exeter Hospital, Exeter, UK; 2Southend University Hospital, Southend, UK; 3HBS Medical and Dental College, Islamabad, Pakistan

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*Correspondence, Shakeel Ahmad: drshakee133@gmail.com

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 practiced 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.