CL22 - FIRST YEAR OF DESCEMET MEMBRANE ENDOTHELIAL KERATOPLASTY (DMEK) IN HOSPITAL SÃO JOÃO

Pinheiro-Costa, J., Torres-Costa, S., Torrão, L., Moreira, R., Falcão-Reis, F.
(Centro Hospitalar São João)

Purpose: To evaluate the learning curve and the results of the first year of DMEK in Hospital São João.

Methods: DMEK was performed in 14 eyes (13 patients) to manage corneal endothelial disorders. Donor tissue was prepared always by the same surgeon in operative room. Visual acuity and endothelial cell count were evaluated prior and postoperatively. Intraoperative and postoperative complications were documented.

Results: Of the 14 eyes (7 Fuchs endothelial dystrophy, 3 bullous keratopathy after cataract surgery, 1 previous graft failure and 1 Iridocorneal endothelial syndrome), 12 eyes showed a good recovery with progressive edema resolution and visual acuity improvement. The mean best corrected visual acuity (BCVA) improved from 0.15 to 0.54 - snellen scale (range 0.2 to 1.0).

Two cases showed graft failure in the first postoperative month (1 bullous keratopathy and 1 central graft detachment), requiring regraft (1 Descemet stripping automated endothelial keratoplasty (DSAEK) and 1 DMEK).

The mean follow-up time was 7.8 months (2-14 months). The mean donor cell count was 2417 (2022-2907). The mean endothelial cell count by the second month of follow-up was 1642 (1270-2406), with a mean peroperative endothelial cell loss of 32.1%.

Intraoperative complications were not documented. No tissue loss was reported during the preparation of the endothelial roll.

Conclusion: DMEK may offer visual acuity improvement and appears to be a safe and effective treatment for corneal endothelial diseases.