3 de Dezembro **14h30 | 16h00 – Sala 4**

Moderadores | Chairs: Rita Gama (GamaEyecare), Melo Beirão (CHUPorto), José Pedro Silva (H. Lusiadas, Lisboa), Ricardo Bastos (H. Lusíadas, Porto), Ana Luisa Rebelo (H. Évora), Maria Lisboa (H. Cascais)

VD 24

MULTILAYER AMNIOTIC MEMBRANE TRANSPLANTATION FOR PARTIAL THICKNESS CORNEAL/SCLERAL THINNING AFTER PTERYGIUM SURGERY

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Introduction and Objectives: Corneal dellen with scleral thinning is a rare complication of pterygium surgery, caused primarily by disturbance of the tear film and severe dehydration of the cornea. Left untreated, the condition may lead to corneal perforation. Amniotic membrane graft placement is a leading treatment option in these cases. The amniotic membrane, a tissue obtained from the inner layer of the placenta, consists of a thick basement membrane and avascular stroma. It is widely used in Ophthalmology to treat a variety of ocular surface diseases, due to its anti-inflammatory, antifibrotic and antimicrobial actions while promoting rapid epithelization.

Materials and Methods: Detailed video description of an amniotic membrane transplant for severe corneal/scleral thinning following pterygium surgery.

Results and Discussion: A 71-year-old man underwent uneventful right eye pterygium excision with placement of a conjunctival autograph. Two weeks after surgery a severe corneal dellen with adjacent scleral thinning was noted, with no conjunctival autograph in place. The patient was proposed for amniotic membrane graft, using a multilayer technique, under sub-tenon anaesthesia. Two layers of amniotic membrane were placed with the stromal side down to provide the corneal and conjunctival epithelial cells a substrate for growth, aiding re-epithelisation, followed by a third, bigger layer, with the epithelial side up, to reduce inflammation and act as support. The graft was anchored with 2 corneal and 5 conjunctival sutures; in the end, a soft bandage contact lens was placed to promote healing, reduce discomfort and provide additional support for the underlaying graft. Post operative day one shows *in-situ* graft, mild hyperaemia, diffuse conjunctival haemorrhage, with few patient complaints. The patient was started on chloramphenicol drops 5 times daily, and scheduled for follow-up at the 2nd and 4th week mark.

Conclusion: Multi-layered amniotic membrane transplantation is a useful option for corneoscleral thinning following pterygium surgery. By facilitating epithelialization and reducing inflammation, it allows for corneal surface reconstruction and prevents further structural compromise, avoiding perforation.