



Osteodontokeratoprosthesis: A tooth for an eye

Mohamed Bahgat Goweida, FRCS, PhD
Assistant Professor, Alexandria University
Consultant, Brighton and Sussex University
Hospital, NHS, UK





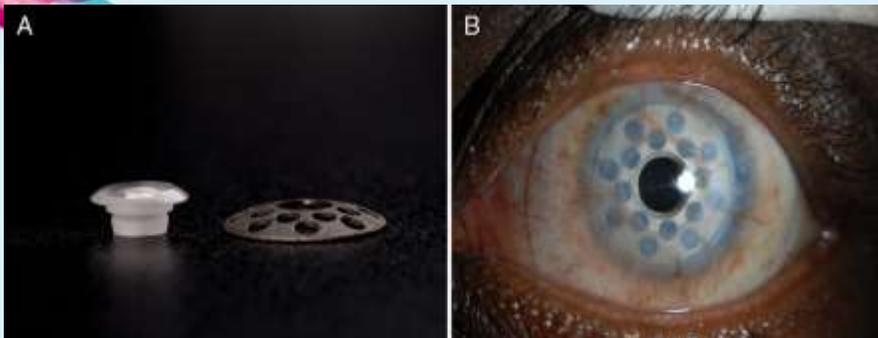
Factors essential for cadaveric corneal grafts survival :

- Normal lid anatomy and function
- Adequate stem cell supply
- Adequate tear function

WET BLINKING EYE



Boston Kpro



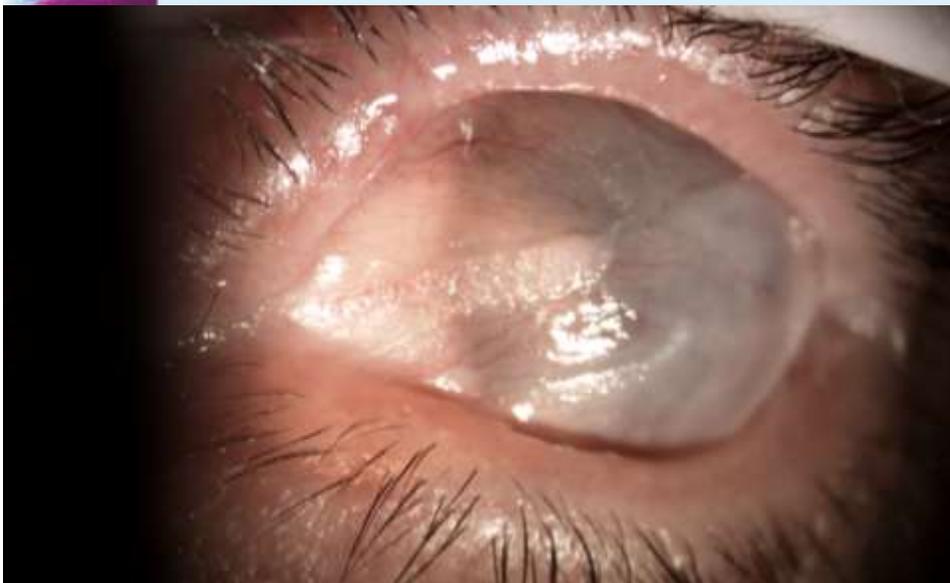
WET BLINKING EYE



Stevens-Johnson syndrome



Sjogren's Syndrome



Cicatricial pimpligoid



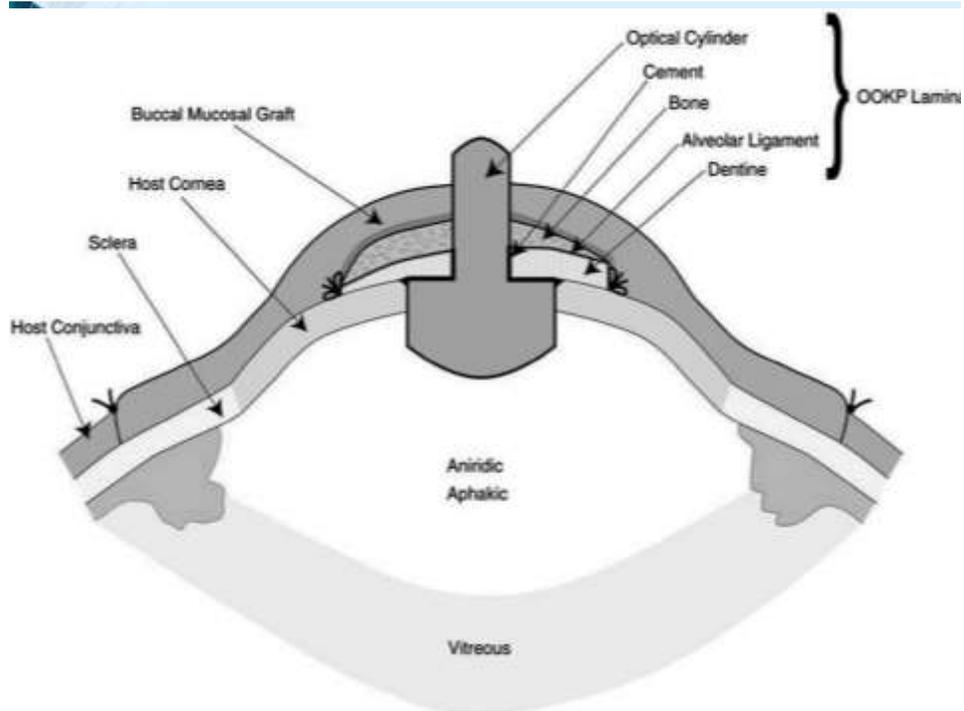
Ectodermal hypoplasia





Modalities of treatment:

- Modified osteo-odontokeratoprosthesis (OOKP).
- Tibial bone keratoprosthesis (T-kpro)





Modified OOKP (stage 1)



Modified OOKP (stage 1)





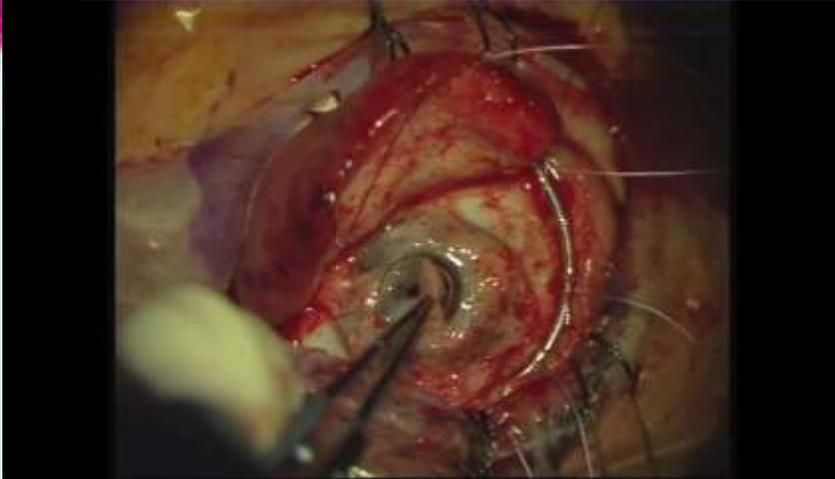
Modified OOKP (stage 1)



Modified OOKP (stage 1)



Modified OOKP (stage 2)



Post operative





Complications



Complications





Modified OOKP

- Best retention rate (81% -100%) after 5 years.
- Less incidence of glaucoma.
- No need for systemic immunosuppression.
- Ideal of keratinized ocular surface and poor eyelid function.



Summary

- Planning a penetrating keratoplasty requires a wet blinking eye with viable limbal stem cell.
- Several treatment options have been tried with varied success in eyes not amenable to the traditional cadaveric corneal transplant.
- OOKP is considered the best modality of treatment in eyes with dry keratinized surface and LSCD.



THANK YOU