



**CATARATA, Córnea, Cirurgia Implanto-refractiva,
Superfície ocular externa**

08:30 | 10:45 SALA NEPTUNO

Mesa: Walter Rodrigues, João Póvoa, João Feijão

09:50

VD45 - SURGICAL CHALLENGES IN KERATOPLASTY

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Introduction: Solving complicated corneal cases can be challenging. We present four highly problematic cases of keratoplasty referred to our Cornea department that put the surgeon's skills to test.

Material and Methods: The first case was a long-term 4-mm corneal perforation in a 69 year-old female with rheumatoid arthritis and Sjögren Syndrome. A protected penetrating keratoplasty was performed to avoid the complications of open-sky surgery. The second patient was a 70 year-old female with severe corneal neovascularization after recurrent herpes virus keratitis in her left eye. A penetrating keratoplasty was performed with an 8 mm cobalttitanium-molybdenum Krumeich ring, which has been found to inhibit growth of superficial vessels into the transplant and appears to reduce the rate of immune reactions. The third case consisted of corneal scarring and neovascularization secondary to repeated herpes virus keratitis in a 52 year-old male, treated with a penetrating keratoplasty. The patient presented with peripheral recurrent melting in previous keratoplasty for which prior amniotic membrane and lamellar scleral grafts had failed. Thus, peripheral lamellar and a new penetrating keratoplasty were performed. The fourth patient was a 31 year-old male with recurrent pterygium associated with symblepharon after multiple interventions, in which peripheral lamellar keratoplasty, symblepharon resection and fornix reconstruction with amniotic membrane transplantation were carried out.

Results: Ocular globe integrity was achieved and visual acuity improved from light perception to hand motion in the first patient. Unfortunately, she had severe retinal atrophy. In the second patient, visual acuity improved from hand motion to 20/100 six months after surgery, without neovascularization of the cornea donor across the ring. The melting process halted in the third patient, and cataract surgery had to be performed in order to recover visual acuity. The last patient had good aesthetic result and visual acuity improved from 20/40 to 20/25 one month after surgery. In a 6-month follow-up no signs of recurrence were observed.

Conclusions: The complexity of these cornea cases, demanded the surgeons combine several techniques during keratoplasty in order to achieve satisfactory results.