( ) R1 ( ) R2 ( ) R3 (X) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( ) PIBIC Last Name - Mitsuhiro First Name - Márcia Regina Middle - Kimie Higashi

Service (sector) Cornea and External Disease Nº CEP

High risk corneal graft treated with Systemic Cyclosporine A Authors: Mitsuhiro, M. H.; Beaujon-Balbi, O., Kozaki, K.; Barbosa, L.. Purpose: The success rate for penetrating keratoplasty is usually very high. However, the risk for immunologic graft failure increases significantly when there is more than one quadrant of stromal vascularization or a prior immunologic graft failure. Our purpose was to study the evolution of cases of penetrating keratoplasty treated with systemic Cyclosporine A, whose visual outcome is threatened by a high risk for rejection of the corneal graft. Methods: High risk corneal transplant patients were defined as having a history of previous immunological graft failure and at least two quadrants of deep stromal vascularization. All patients had visual acuities of less than 20/200 in the affected eyes and a systemic evaluation was performed before they received any medication. Results: Three patients underwent penetrating keratoplasty. Cataract extraction was also performed in one case due to lens opacity. All three patients received one drop per hour of topical 1% Prednisolone, Tobramycin instilled four times a day, 1 mg/kg/day of systemic Prednisone and 5 mg/kg/day of systemic Cyclosporine A. The dose of the topical medications was reduced after the first week and the systemic drugs were reduced from the second month of surgery. No sign of rejection occurred and the donor button remained transparent during the postoperative period. However, systemic Cyclosporine A was interrupted in two cases after a follow up of three months because the visual acuity did not improve (light perception) due to a myopic degeneration of the retina in one patient and because of uncontrolled postoperative glaucoma in the second case. Five months after surgery, the corneal graft of the third case remains transparent using 1.5 mg/kg/day of Cyclosporine A. Conclusion: Cyclosporine A has long been considered a good drug to prevent rejection in cases of high risk keratoplasty (Documenta Ophthalmologica 1986, 62; Transplantation 1988, 45; Ocular Immunology and Inflammation 1996, 4 (1). However, our data is still insufficient to evaluate the results with systemic Cyclosporine A, especially concerning side effects, and to allow a comparison between this treatment and topical Cyclosporine A or newer drugs in Ophthalmology, such as FK506 and Mycophenolate Mofetil, already used for kidney and liver transplantations.