

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
PIBIC Last Name - Santos First Name - Myrna Middle - Serapião dos

Service (sector) Cornea and External Disease N° CEP

Causes of Ocular Surface Reconstruction Failure

Santos MS, Valadares CRT, Gomes JAP

Purpose: Despite new strategies developed in the last few years for treatment of limbal stem cell deficiency, significant failure rates have been reported after ocular surface reconstruction. The purpose of this study is to evaluate the causes of ocular surface reconstruction failure in patients with total limbal stem cell deficiency (LSCD), who underwent living-related conjunctival limbal allograft (Ir-CLAL) associated with amniotic membrane transplantation (AM). Methods: Fifteen patients who developed ocular surface reconstruction failure after Ir-CLAL associated with AM were included in this study. The causes of failure were characterized and a classification based on time to development of surgical failure was established. Results: There were 6 patients with LSCD secondary to chemical injury and 9 secondary to Stevens-Johnson syndrome. The mean follow-up time was 17.5 months (5-30 mo) and the mean time to surgical failure was 6.5 months (1-24 mo). Acute failure (<1 month post-op) was observed in 6 patients (40%), early failure (between 1 and 12 months post-op) in 5 patients (33.5%) and late failure (>12 months post-op) in 4 patients (26.5%). The most frequent cause of failure was chronic inflammation in association with severe dry eye in 7 patients (47%), followed by post-operative infection in 4 (26.5%), rejection in 2 (13.5%), acute inflammation (melting of the graft) in 1 (6.5%) and presumed limbal stem cell exhaustion in 1 patient (6.5%). Conclusion: Most of failures occurred in the first year after surgery (acute and early failure). Chronic inflammation in association with severe dry eye was the most frequent cause of ocular surface reconstruction failure in this study.