

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo PIBIC

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Service (sector)

Cornea and External Disease

Nº CEP

Ocular surface reconstruction with amniotic membrane transplantation in chemical burn.

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Purpose: Amniotic membrane transplantation (AMT) has been consolidated as a satisfactory therapeutic option in the management of ocular surface disorders. The purpose of this study is to report the surgical outcome of preserved AMT in ocular chemical burn with partial (PLD) and total (TLD) limbal stem cell deficiency.

Methods: Amniotic membrane was obtained at the time of cesarean section and was preserved at -800 C in glycerol and cornea culture medium 1:1. Twenty eyes of 20 patients (18 males / 2 female; mean age 37,5 yo (range 12-72 yo)) with chemical burn were treated with excision of cicatricial tissue, followed by AMT, associated (16 eyes with TLD) or not (4 eyes with PLD) with limbal and conjunctival grafts from live donors.

Results: With a mean follow-up time of 9.5 months (range 2-19 months), satisfactory ocular surface reconstruction was obtained in 17 eyes (85%), with reduced inflammation and vascularization, and a mean epithelialization time of 3 weeks. Surgical failure was observed in 3 severe cases (15%). Except for 2 of these eyes, that maintained the visual acuity, a significant visual improvement was observed in all cases.

Conclusions: AMT seems to be an efficient adjunct for ocular surface reconstruction in chemical burn with PLD. It is also effective in TLD, when associated with limbal and conjunctival stem cell transplantation, seems to be an efficient adjunct for ocular surface reconstruction in chemical burn.

CR: None