

# **Amniotic membrane transplantation and fibrin glue in the management of corneal ulcers and perforations: A review of 33 cases.**

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## **Abstract:**

**Purpose:** To evaluate the efficacy of amniotic membrane in corneal ulcers refractive to conventional treatment and amniotic membrane with fibrin glue in corneal perforations. **Methods:** Amniotic membrane transplantation (AMT) was performed in 33 eyes from 32 patients for corneal ulcers refractive to conventional treatment. Fourteen ulcers were perforated and received fibrin glue and amniotic membrane. Ulcers were divided into 3 groups: neurotrophic or exposure, autoimmune, and other etiology. **Results:** Overall success was observed in 80% (27/33 eyes) of the cases, with success rates of 87.5% (14/16 eyes), 70% (7/10 eyes), 85.7% (6/7 eyes) in groups 1, 2, and 3, respectively. The ulcers healed in a mean time of 3.6 +/- 1.6 weeks and the follow-up was 14.8 +/- 9.9 months. Failure was noted in 6 eyes with severe neurotrophic keratin's, Stevens-Johnson syndrome, ocular cicatricial pemphigoid, and Acanthamoeba keratitis. Grafts with fibrin sealant showed a success rate of 92.9% (13/14 eyes) compared to 73.7% (14/19 eyes) for amniotic grafts alone. In patients with severe limbal damage, a success rate of only 20% (1/5) was observed. **Conclusions:** AMT is a viable option in the treatment of nonhealing corneal ulcers of various depth and etiologies. Perforations up to 3 mm can be safely managed by fibrin glue and AMT. These techniques lead to rapid reconstruction of the corneal surface and can give a good final functional result or allow keratoplasty to be done in more favorable conditions. Copyright © 2005 by Lippincott Williams & Wilkins.