

ABSTRACT

Experience of Amniotic Membrane Transplant in Corneal Diseases at Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan

Wajid Ali Khan FRCS, M. Abdul Moqet FCPS, Sabeen Chaudhry FCPS, Fareeha Ambreen M.Phil

Purpose: To assess the quality of human amniotic membrane (HAM) processing at Al-Shifa HAM bank and to analyze the outcome of amniotic membrane transplant in different corneal pathologies at Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.

Design: Prospective Interventional Case Series

Participants and Methods: Consecutive 102 eyes of as many patients (72 males and 30 females) from July 2006 to August 2007 presented at Corneal Clinic were included in the study. Average age of patients was 38 years (4.5-90 years). Frozen human amniotic membrane (HAM) from a seronegative donor stored at -80oC in Dulbecco's Modified Eagle Medium (DMEM) and glycerol was used for transplant in different corneal diseases after thawing at room temperature for half an hour. HAM was applied epithelial side up. It was spread over the whole cornea beyond limbus and anchored through continuous/interrupted 10/0 monofilament nylon sutures on the corneal side and 7/0 vicryl on the conjunctival side. Over lay (patch) and in lay (graft) technique was used in most of the cases while multilayered technique was used in case of deep ulcer and corneal perforation. Bandage contact lens (BCL) was applied and discontinued after epithelialization in all the cases. The follow up visits were on post operative day one, one week, one month, three months and then after every six months. In clinical examination luster and lubrication of the eye and stability of corneal surface was noted. In subjective examination, a performa was designed to assess reduction in pain, watering, irritation and status of overall comfort of the patient. Average follow up period was 132 days.

Results: Overall 85.3% patients had subjective improvement while 74.5% showed clinical improvement; Visual acuity improved in 49% patients. AMT was repeated in 8 patients. No intraocular infection was reported in study cases.

Conclusion: The study concludes that AMT is a useful treatment option in a variety of ocular surface pathologies. However, its efficacy varies in different diseases. The study also proved reliability of processing technique at Al-Shifa Human Amniotic Membrane Bank. Al-Shifa Journal of Ophthalmology 2007; 3(2): 49-55 © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.