ABSTRACT

AIM:

To compare the clinical results of conjunctival autograft and amniotic membrane transplantation after double pterygium excision. We also compared the final cosmetic outcome of these two techniques in an effort to determine whether amniotic membrane transplantation yields acceptable cosmetic results as conjunctival autografting in pterygium surgery.

STUDY DESIGN:

Prospective interventional double masked randomised controlled clinical trial.

MATERIALS AND METHODS:

Patients who came to Aravind Eye Hospital with double pterygium were assessed. A total of 31 patients were included in the study. Recruitment period was from October 2011 to March 2012. After pre-operative assessment is over, the patients are randomly assigned into any of the following two groups.

Group – A:

Double Pterygium excision with Amniotic Membrane on Nasal side and Conjunctival Autograft on Temporal side.

Group – B:

Double Pterygium excision with Amniotic Membrane on Temporal side and Conjunctival Autograft on Nasal side.

On first post operative day, patients were examined and started on steroid antibiotic eye drops 4 times a day for 3 weeks. Follow up visits were 3rd week, 3rd month, 6th month and 12th month.

RESULTS:

Out of 31 patients (Group A -15, Group B -16), 8 patients (25.8%) had recurrence. Among them, 4 patients (50%) belong to Group A and 4 patients (50%) belong to Group B. All the 8 recurrences were on the side of amniotic membrane.

DICUSSION:

Although successful results have been reported with the CAT technique, this technique has 2 important limitations: It is difficult to close the large conjunctival defects, and there is a need to reserve conjunctiva for glaucoma surgery with a filtering bleb (which may be required in the future). Moreover, in cases where the conjunctiva is scarred from previous surgery for pterygium, alternative surgical techniques must be used. These problems necessitate the use of the amniotic membrane in pterygium surgery. Besides a lack of potential disadvantages associated with CAT, it is suggested that it has anti inflammatory

effects and reduces scar formation; both of which act to decrease pterygium recurrence. Owing to these properties of the amniotic membrane, it is a favourable alternative technique to CAT for pterygium surgery.

CONCLUSION:

Although it was proven that conjunctival graft was better than amniotic graft, amniotic graft would be of great use in double pterygium, glaucoma patients where conjunctiva has to be preserved and in casesof subconjunctival fibrosis.

KEY WORDS: Double pterygium, conjunctival autograft, amniotic graft.