

Recurrence after Primary Pterygium Excision: Amniotic Membrane Transplantation with Fibrin Glue Versus Conjunctival Autograft with Fibrin Glue.

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Abstract:

Purpose: The aim of the present study was to compare the surgical results and recurrence rates of primary pterygium excision with conjunctival autografts versus amniotic membrane grafts fixated with fibrin glue. **Materials and methods:** In this prospective study, 73 eyes of 65 patients who had undergone conjunctival autograft group (CAG) (n:37) or amniotic membrane group (AMG) (n:36) after pterygium excision were evaluated. Fibrin glue was used for the fixation of grafts in both groups. The patients were followed up for 12 months. Postoperative complications were recorded. The rate of recurrence was defined as the primary outcome measure. **Results:** In the CAG, partial dehiscence of the graft was observed on the nasal edge on postoperative day 1 in two (5.4%) eyes that healed with secondary re-epithelialization at week 1. Twelve (32.4%) eyes showed a yellowish-orange or hemorrhagic edema of the graft on postoperative day 7 that spontaneously resolved in 1 to 3 weeks. In the AMG, partial dehiscence and folding of the amniotic membrane occurred in two (5.5%) eyes. Two eyes (5.4 %) in the CAG developed corneal recurrence and five eyes (13.8%) in the amniotic membrane graft group developed recurrence; one limbal (2.7%), four corneal recurrences (11.1%) ($p = 0.25$). **Conclusion:** Fibrin glue is a safe and effective method for attaching conjunctival or amniotic membrane grafts for wound closure following pterygium surgery. Although the results were not statistically significant, amniotic membrane grafting using fibrin glue seems to have a higher pterygium recurrence rate compared with conjunctival autografting.

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