Conjunctival autografting without fibrin glue or sutures for pterygium surgery.

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Abstract:

PURPOSE: A prospective randomized case-control study conducted at a tertiary level eye care center to compare the outcomes of conjunctival autograft (CAG) with fibrin glue and CAG with patients' own blood acting as a bioadhesive in treating pterygium after surgical excision. METHODS: Twenty eyes of 20 patients with pterygium were randomly divided into 2 groups: group I (10 eyes) underwent CAG with fibrin glue and group II (10 eyes) underwent CAG with the patients' own blood coagulum acting as a bioadhesive or fixative. RESULTS: The time required for the surgery was compared. The patients were then closely followed up for a period of 12 months for anatomy, outcomes of graft, recurrence rate, graft displacement, retraction, inflammatory reaction, if any, graft failure, or any other complications. The duration of surgery was less in group I (mean duration, 14.74 +/- 2.35 minutes) than group II (mean duration, 17.45 +/- 2.89 minutes). We found that although the rate of recurrences was equal in grafts with the glue (10%) and the grafting with autologous blood (10%), the complications regarding graft displacement and graft retraction were more common in patients with grafting with autologous blood (10%) than in those with grafting with the glue. However, the difference was not found to be statistically significant (P = 0.3185). These complications were associated with larger grafts. CONCLUSIONS: This study suggests that autologous fibrin in blood is a useful alternative method for graft fixation in pterygium surgery. We found the newer procedure of autografing free of any untoward complication in small- to average-sized grafts.