Autologous blood versus fibrin glue in pterygium excision with conjunctival autograft surgery.

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Abstract:

Purpose: To evaluate graft stability and recurrence rate between fibrin glue and autologous blood in pterygium conjunctival autograft surgery. Methods: A prospective, randomized, single-blinded clinical trial to assess the efficacy of autologous blood in place of fibrin glue in pterygium surgery. A total of 120 eyes of 111 patients were randomized according to pterygium morphology, to undergo pterygium surgery with autografting using either autologous blood or fibrin glue. All patients were operated by a single surgeon; 58 eyes were operated using fibrin glue and 62 eyes had a conjunctival autograft with autologous blood. Patients were seen on postoperative day 1, 1 week, 1 month, 6 months, and 1 year after surgery. Graft stability and pterygium recurrence were graded by an independent observer who was masked to the method of treatment. Results: All 120 eyes completed the 1-year follow-up. Graft loss was seen only in the autologous blood group. Of the 62 eyes in this group, a total of 15 (24.2%) grafts dislodged. Recurrence was calculated after excluding grafts that were dislodged. Of the 105 patients, there were a total of 7 recurrences, 2 (3.4%) from the fibrin adhesive method and 5 (10.6%) from the autologous blood method. This was not statistically significant (P = 0.238). Conclusions: Autologous blood does not exhibit similar graft stability seen with fibrin glue. Although the recurrence rate may not be significant, careful patient selection and a standard method needs to be laid out before the use of this method is widely accepted.