

Fibrin glue versus sutures for conjunctival autografting in pterygium surgery: a prospective comparative study.

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Abstract:

AIM: To compare the use of fibrin glue versus sutures for fixating conjunctival autografts in patients undergoing pterygium excision.

METHODS: Fifty patients (50 eyes) with primary pterygium were randomised to undergo pterygium surgery using either fibrin glue (25 eyes) or 8-0 Vicryl sutures (25 eyes) to attach the conjunctival autograft. The patients were followed up for 12 months. Outcome measures were postoperative patient comfort, duration of surgery and recurrence of pterygium.

RESULTS: In the fibrin glue group, the mean operation time was 15.7 (SD 2.4) min (range 12-18 min) and in the suture group ($p < 0.001$) it was 32.5 (6.7) min (range 25-40 min). The intensity of the postoperative pain, foreign-body sensation, irritation and epiphora were significantly lower in the fibrin glue group than in the suture group ($p < 0.001$). The intensity of itchy sensation at the first two postoperative visits was lower among patients in the fibrin glue group (five patients, 20%) than in the suture group (12 patients, 48%) ($p < 0.05$). Two patients in the fibrin glue group had partial graft dehiscence; these grafts were successfully reattached with fibrin glue. At the end of follow-up, pterygium recurrence was observed in one eye (4%) in the fibrin glue group and in three eyes (12%) in the suture group ($p < 0.05$).

CONCLUSION: The use of fibrin glue in pterygium surgery with conjunctival autografting

significantly reduces surgery time, improves postoperative patient comfort and results in a lower recurrence rate compared with suturing.