Comparison of fibrin glue and suture technique in pterygium surgery

performed with limbal autograft.

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Abstract:

AIM: To compare the efficiency and safety of fibrin glue to suture technique in pterygium surgery

performed with limbal autograft. METHODS: A prospective randomised clinical trial was carried out

in 58 eyes of 58 patients operated for primary nasal pterygium. Autologous conjunctival graft taken

from the superotemporal limbus was used to cover the sclera after pterygium excision. In 29 eyes,

the transplant was attached to the sclera with a fibrin tissue adhesive (Beriplast P) and in 29 eyes

with 8-0 Virgin silk sutures. The Mann-Whitney U test was used for statistical analysis. Postoperative

patient discomfort (pain, stinging, watering) and biomicroscopic findings (hyperemia, edema) were

graded. Patients were followed up at least for six months. RESULTS: Subconjunctival hemorrhage

occured under the graft in one patient in group 1. In seven cases of group 2, sutures were removed

at the 15th day because of granulomatous tissue reaction. Patient symptoms were significantly less

and biomicroscopic findings were better in group 1. Pterygium recurrence was seen in one case of

group 1, and 2 cases of group 2. Average surgery cost was higher (P<0.05) and surgery time was

shorter (P<0.05) in fibrin group. CONCLUSION: Using fibrin glue for graft fixation in pterygium

surgery causes significantly less postoperative pain and shortens surgery time significantly.