Fibrin adhesive in conjunction with epithelial ingrowth removal after laser in situ keratomileusis: Long-term results.

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Abstract:

Purpose To describe the long-term results of fibrin adhesive use in the management of epithelial ingrowth after laser in situ keratomileusis (LASIK). Setting Private practice, Minneapolis, Minnesota, and an academic medical center, Durham, North Carolina, USA. Design Retrospective case series. Methods Patients with a history of LASIK had epithelial ingrowth removal with mechanical debridement and fibrin glue application. Visual outcomes and the presence or absence of epithelial ingrowth were evaluated again after 3 months and at the last follow-up. The main outcome measures were recurrence of epithelial ingrowth and visual acuity. Results Thirty-nine eyes of 38 patients were evaluated. After epithelial ingrowth removal and application of fibrin glue, 31 eyes (79.5%) had no recurrence of ingrowth at the final follow-up and 5 eyes (12.8%) had mild epithelial ingrowth not requiring removal. Three eyes (7.7%) had significant epithelial ingrowth at the 3-month follow-up that required subsequent removal and fibrin application. At the 3-month follow-up visit, 76.9% of eyes achieved 20/25 or better corrected distance visual acuity (CDVA) and 69.2% of eyes achieved 20/40 or better uncorrected distance visual acuity (UDVA). At the last follow-up visit (mean 26.6 +/- 17.0 months [SD]), 84.6% of eyes had 20/25 or better CDVA and 74.4% of eyes had 20/40 or better UDVA. Conclusions Fibrin adhesive in conjunction with manual epithelial removal prevented a clinically significant recurrence of epithelial ingrowth in the majority of eyes. Larger randomized studies are needed to compare the success of this technique with that of others. Financial Disclosure No author has a financial or proprietary interest in any material or method mentioned.