

# **Surgical revision of dysfunctional filtration blebs with bleb preservation, sliding conjunctival flap and fibrin glue.**

Authors: Lee GA, Holcombe DJ

Publication Date: 2010

## **Abstract:**

**PURPOSE:** The introduction of anti-metabolite regimens to glaucoma filtration surgery has improved post-operative intraocular pressure (IOP) control; however, it has also increased the frequency of dysfunctional blebs. In this study, we report a surgical technique for the repair of trabeculectomy blebs using bleb preservation, a sliding conjunctival flap, and fibrin glue.

**METHODS:** This study is a retrospective, non-comparative, consecutive case series involving 10 eye samples collected from 10 patients (6 M : 4 F) with one or a combination of bleb overfiltration, dysesthesia, thinning, leak, or blebitis, in which a conjunctival flap was advanced over the failing bleb and secured in place using fibrin glue and sutures.

**RESULTS:** All patient eyes had symptom resolution post-operatively. There were no bleb leaks or hypotonous eyes after an average follow-up of 15.2 months (range: 6-31 months). Three patients required needling augmented with 5-fluorouracil needling to maintain IOP control. IOP decreased from a mean of 13.6 $\pm$ 1.8 mm Hg (with a mean of 0.7 glaucoma medications) pre-operatively to 11.7 $\pm$ 0.9 mm Hg (with a mean of 0.9 glaucoma medications).

**CONCLUSION:** Conjunctival flap advancement with bleb preservation and adjunctive fibrin glue is a successful technique used for the treatment of bleb dysfunction. The major advantages compared with other techniques are preservation of IOP control and reduced post-operative complications,

such as wound leak and the need for re-suturing.