Ologen implants as an adjuvant for revision surgery after failed trabeculectomy
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Purpose: to evaluate the efficacy of Ologen Collagen Implants compared to antimetabolites as an adjuvant in revision surgery for failed trabeculectomy.

Methods: retrospective comparative case series. Thirty failing blebs underwent either needling with antimetabolites injections (Mitomycin C or 5-Fluorouracil; n = 15) or revision surgery with ologen (n = 15) as an adjuvant. The surgical outcome of both groups were analyzed and compared. Bleb morphology, intraocular pressure (IOP) and number of antiglaucoma medications in both groups were analyzed at 1 month, 3 months, and 6 months after surgery.

Results: The mean age of patients was 72.5 ± 10.3 in the ologen group and 66.8 ± 11.9 in the antimetabolite group respectively. The mean IOP before surgery was 31.1 ± 8.4 in the ologen group and 28.6 ± 4.9 in the antimetabolite group. In both groups, the mean IOP was significantly reduced after surgery (Student’s t test, \( p \leq 0.01 \)). At six months the mean postoperative IOP was lower in the ologen group (14.5 ± 4.9) than in the antimetabolite group (18.7 ± 5.9) and the difference was not statistically significant (student’s t-test \( p. 0.058 \)). The number of antiglaucoma medications was also reduced in both groups 6 months postoperatively. Blebs in the antimetabolite group were less elevated and less vascularized. Four bleb leaks (24%) were seen in the ologen group with hypotony and were surgically repaired.

Conclusion: Bleb revision with ologen implant can lead to significant IOP reduction and improve surgical outcome.