

Unplanned Return to the Operating Room After Trabeculectomy

Nur Cardakli (1) , David S Friedman (2) , Michael V Boland (3)

1 Glaucoma Center of Excellence, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA.

2 Glaucoma Center of Excellence, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA; Glaucoma Center of Excellence, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, Massachusetts, USA.

3 Glaucoma Center of Excellence, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA. Electronic address: boland@jhu.edu.

PURPOSE: To determine the unplanned return to operating room (OR) rate within 180 days and at any time postoperatively after trabeculectomy performed or supervised by an attending surgeon and to identify associated factors.

DESIGN: Retrospective case-control study.

METHODS: Review of 881 eyes that underwent trabeculectomy at an academic glaucoma service between January 2014 and December 2016. Inclusion criteria included adult patients with postoperative follow-up >180 days and no other glaucoma-related surgery within the prior year. For each eye that underwent reoperation, a control was time-matched within 1 month.

RESULTS: The reoperation rate within 180 days was 9.5% (84/881) and at any time postoperatively was 23.3% (205/881) . When intraoperative bleb needling cases were excluded, the reoperation rate was 6.5% (57/881) within 180 days and 13.6% (120/881) at any time postoperatively. Mean postoperative follow-up was 2.9 ± 1.1 years. The most common reoperations within 180 days were bleb revision (32.1%) and intraoperative bleb needling (28.6%) and at any time postoperatively were bleb needling (36.1%) , bleb revision (23.9%) , and tube shunt implant (13.2%) . At last follow-up, eyes that returned to OR and control eyes were similar in terms of mean intraocular pressure (IOP) , the proportion of eyes meeting target IOP, and change in visual acuity since the original trabeculectomy.

CONCLUSIONS: Nearly 10% of eyes returned to OR within 180 days and over 20% of eyes required reoperation at any time postoperatively with a mean follow-up of nearly 3 years. Additional studies should evaluate unplanned return to OR as a measure of surgical quality within ophthalmology.

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