

# Frequency of Retinal Redetachment after Cataract Surgery in Eyes with Previous Scleral Buckling Surgery

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**Purpose:** To determine the cumulative risk and outcome of retinal redetachment after cataract surgery, in eyes with a history of retinal detachment repair by scleral buckling techniques.

**Design:** Population-based, retrospective cohort study.

**Participants:** All phakic patients without previous ocular surgery or significant trauma who underwent scleral buckling surgery for rhegmatogenous retinal detachment between January 1, 2001, and December 31, 2010, at Norrlands University Hospital, Sweden (n = 537).

**Methods:** International Classification of Diseases 10 diagnosis codes corresponding to rhegmatogenous retinal detachment were used to identify all cases. Medical charts of all patients identified were reviewed to confirm the diagnosis. Any recurrence of retinal detachment and the visual outcome in these cases were examined. The frequency of redetachment and the time span from cataract surgery to redetachment surgery were analyzed.

**Main Outcome Measures:** Any redetachment surgery after cataract surgery, best-corrected visual acuity (BCVA).

**Results:** Three hundred and one (56%) male and 236 (44%) female patients were identified. During the follow-up period, 145 of 537 patients (27%) had phacoemulsification surgery, with a median time span of 3.4 years after the retinal detachment repair. Male patients had cataract surgery significantly more often (31% vs. 22%; P = 0.036), and at an earlier age, than female patients (65.6 vs. 69.4 years; P = 0.013). Recurrence of retinal detachment occurred in 3 patients (3/145; 2.1%), at 2.4, 3.9, and 6.9 years after cataract extraction, and their final BCVA was 20/70, 20/25, and 20/30, respectively. The cumulative percentage of redetachment surgery after phacoemulsification was 1% up to 10 years after the scleral buckling surgery, as calculated by life table analyses. Ten years after cataract surgery, the cumulative percentage of redetachment surgery was 5% in eyes with previous scleral buckling surgery.

**Conclusions:** In patients with a history of previous scleral buckling surgery, the risk of redetachment after cataract surgery is low. In these patients, phacoemulsification can be performed safely and there is no need for extended postoperative attention. It is, however, important to inform all patients with previous retinal detachment surgery to seek prompt medical care if they experience symptoms of redetachment. This is important even several years after the cataract surgery was performed.

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